

OBSERVATIONS
ON
A STRIDULOUS AFFECTION
OF THE
BOWELS;

AND ON
SOME VARIETIES OF SPINAL DISEASE :

WITH AN
Appendix of Cases.

—000—
BY J. BRADLEY, M. D.

—000—
Neque enim credo, posse eum scire, quomodo morbos curare conveniat, qui, unde hi sint, ignoret.—CELSUS.

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PREFACE.

It is not the Author's design, in committing the following sheets to the press, to attempt an elucidation of all the phenomena peculiar to his subject,—from a conviction of his inadequacy to the task. He, however, flatters himself, that these remarks may not only be useful to the younger part of the profession, but may stimulate some future practitioner, whose opportunities for observation enable him to give a more correct pathology. Such a work is a *desideratum*, and would doubtless be hailed by the profession at large.

The Author is aware, indeed, that some apology is necessary, not only for the introduction of a new term, but for the desultory manner in which this work is written ; and for the tautology, or frequent repetition of the same phraseology,—which is almost unavoidable when the subject unfolds many shades of character, but indistinctly marked.

The Cases of Stridor Abdominalis given in the

Appendix, are the whole which have occurred in the Author's practice, for the last seven years, save two, which were not under his immediate care. Those which more particularly relate to affections of the spine, are, collectively, about one half of the number he has attended during this period ; and, with the exception of a few, as to interest, are a fair specimen of the termination of the whole.

In the course of his practice, he has had too many opportunities both of arraigning his own judgment, and lamenting the mistakes of his more experienced brethren, in not detecting spinal disease at an earlier stage. It was this painful reflection that induced him to pay some attention to this subject,—the result of which, he hopes, may prove useful to the young practitioner, till a more complete nosology be established.

HUDDERSFIELD;

January 1, 1818.

CONTENTS.

	Page
CHAP. I. - INTRODUCTORY Observations:—brief History and Symptoms of the early Stage of the Complaint - - - - -	1
CHAP. II. - Symptoms of the more advanced Disease, attended with Distortion of the Spine -	8
CHAP. III. - Further and anomalous Symptoms, and termination of the Disease - - - - -	11
CHAP. IV. - Further Account of the History of Stridor Abdominalis - - - - -	21
CHAP. V. - Causes of the Affection; Persons subject to it; and Enumeration of Diseases liable to be mistaken for it - - - - -	27
CHAP. VI. - Thoughts on Spinal Affections in general, together with their Treatment as preparatory to the Cure of Stridor Abdominalis:—Causes of Distortion of the Spine - -	34
CHAP. VII. On mechanical Agency in causing and curing Distortion - - - - -	38
CHAP. VIII. Further Method of treating Distortion - -	42
CHAP. IX. - On the Cure of Stridor Abdominalis - -	50
CHAP. X. - Further Thoughts on Spinal Affections:—On Lateral Displacement of the Spine, as affecting the Form of the Thorax - - -	51
CHAP. XI. - Symptoms of Lateral Displacement of the Spine, and its Consequences - - - -	61

	Page
CHAP. XII. The Cure of Lateral Displacement of the Spine, and its consequent thoracic Derangements - - - - -	72
CHAP. XIII. Remarks on Spinal Disease, unaccompanied with Change of Structure:—Symptoms of the Disease - - - - -	77
CHAP. XIV. Further Symptoms of the Affection, and its anomalous Sympathies - - - - -	85
CHAP. XV. Symptoms of the Disease in Young Children ; Mode of detecting it, &c. &c. - - -	94
CHAP. XVI. Cure of Disease of the Spine without Distortion, together with extended Remarks on the Use of Caustics - - - - -	100

APPENDIX OF CASES.

SECTION I. Cases of Stridor Abdominalis - - -	111
———— II. Cases of Spinal Disease - - -	175

OBSERVATIONS
ON
A STRIDULOUS AFFECTION
OF THE
BOWELS;

§c. §c.

CHAPTER I.

Brief History and Early Symptoms of the Disease.

THE constitutional affection, of which some of the following pages are a feeble attempt at illustration, is a subject of considerable importance, though little noticed in the records of medical history; but on this head I shall speak with becoming diffidence, as it not unfrequently happens, that authors on medical subjects lay claim to discoveries, or advance, what they conceive to be, new ideas, which ultimately are found to have been anticipated by some more fortunate writer.

This dilemma, however, the author has avoided by disclaiming all such pretensions, and aspiring only to the task of extending the pathological out-

line of an insidious disease, drawn from observation, without entering on the devious field of speculation, or entangling himself in the mazes of hypothesis.

The ancients, who were accurate observers, do not seem to have been well acquainted with this affection; for though a note in the Geneva edition of Hippocrates* taken from Galen, and others evidently glance at it, and some later writers† more explicitly allude to it, yet it is in such a manner as to throw little light either on its nature or origin.

Although new terms can neither simplify nor advance the science of medicine, yet I ventured at first to designate this complaint by the name of *borborigmus coaxans*, signifying a stridulous

* Stridor in excrementis flatuum cum tenui humiditate permixtam copiam et meatuum angustiam indicat, ut scribit Gal. lib. i. cris. et lib. vi. de symp. caus. Sic urina quæ cum stridore emittitur meatuum interceptionem, ac vasorum obstructionem à crassis humoribus significat; aut materiæ contumacis et flatulentæ agitationem, et caloris concoquentis imbecillitatem. Aut igitur medicamentis attenuantibus liberandæ sunt obstructiones et intercepti aditus reserandi, et materia propulsanda est, aut certe ad vesicam labor est quæ imbecillior reddita, flatuum aut materiæ magnam copiam colligit, ex quo libera urinæ emissio præpeditur, sed quodammodo stridet, et obstrepens redditur. Est autem τρύζειν Erotiano το μέτ' ἄσημου ψόφου διαχωρεῖν, ex translatione sumptum ἀπὸ τῆς τρυγόνος οὗ ἀσήμεως καὶ γογγυστικῶς φθεγγεται. Quod gemere de turture dixit Maro. Dicitur et τρίζειν et τρύζειν. Hipp. Sect. 2. Pag. 88.

† Sennertus and Bonetus.

noise within the abdomen, resembling in general the croaking of a frog; and, occasionally, not dissimilar to the sound excited by the action of churning. Subsequently, however, I found this affection described by *Bonetus*, under the title of, "*Ventris rugitus et murmur ab humoribus et flatibus in duplicatura omenti vagantibus;*" and which, if less periphrastical, and otherwise inappropriate, I should have retained, out of compliment to such authority. But to be brief;—I have at length concluded to substitute for the above the simple appellation of *stridor abdominalis*.

The peculiar noise in the bowels, implied by the name, and characterizing the affection, is not confined exclusively to either sex, but is most peculiar to young females, from the age of twelve to thirty years. Anorexia and dyspepsia either precede or accompany it from its first attack; also chlorotic paleness, or loss of complexion, with some degree of emaciation, ensues, together with lassitude, and weariness on loco-motive exertion. There is likewise frequent head-ach, which is sometimes distressing; as also pains in the loins and lower extremities, attended often with some degree of torpor, especially on walking or long standing. Hence the sufferer is constrained to sit down in an easy chair, or rest himself on the sofa.

The pulse, at the onset, or during the first

stage of the complaint, does not vary much from the healthy standard; particularly in the fore-part of the day, when it will range often from seventy to eighty; but in the evening will acquire an increase of ten or fifteen vibrations. The periods of the day, when these changes take place, are, however, sometimes reversed, as this acceleration of pulse will be perceived in the morning; and in proportion to which, not unfrequently, concentrated;—but some variation in this respect may be observed at less extended intervals. It is usually soft, varying in point of fullness; and continues slowly to increase in frequency as the complaint advances.* Slight rigors, or almost a constant sense of chilliness is very prevalent in the day-time, but succeeded in the evening, and during the night, by some preternatural heat, which subsides towards morning, without much increase in the secretions.

Notwithstanding this degree of febrile excitement, there is seldom much thirst; and very often none at all; although the tongue is rather coated with a whitish fur, inclining to a yellow tinge, and often dappled towards the root, especially in the morning. Sometimes, for a few days, this incrustation will be diminished, and the patient more disposed for food; but this change is of

* In estimating the pulse, it will be necessary to observe, that the subjects of this complaint have often bony upper extremities, with the artery at the wrist correspondingly large.

short duration. The urine, at this stage of the complaint, is sometimes rather high-coloured, but at other times little different from a state of health, and seldom lets fall any sediment. The bowels are usually constipated, but the fæces in general exhibit no unnatural appearance.

The noise within the abdomen returns at uncertain intervals in the course of the day, and is of no limited duration. The period of its continuance, however, seldom exceeds twenty minutes, or half an hour; and always, in this stage, whilst the patient is in an erect posture; for, on lying down, it will almost instantly cease, and be no more heard, as long as the body continues in an horizontal position during the usual time for rest.

Whatever is taken into the stomach, whilst the body is erect, has no inconsiderable influence in exciting or abating this stridulous sound. For instance,—after the patient has sat down to a meal, and taken a few mouthfuls, it will in some cases invariably ensue, and continue for some time; after which it becomes weaker, and more and more intermits, till it ceases. On the contrary, however, instead of food producing this effect, it oftener abates this noise; especially when the stomach is empty, and there is faintness, with a sense of craving for food; which is sometimes most prevalent on rising from bed in the morning, about eleven o'clock in the forenoon, and at five or six in the evening.

This noise, which is always under the government of respiration, is, for the most part, similar to the croaking of a frog, especially on inspiration; but on expiration somewhat less so, and conveying an idea as if the sound issued from water,* and often, before it ceases, like the plaintive tone of a dying animal, which is well described in the following passage from the note above quoted:—"Dicitur et *τρεῖζειν* et *τρυζειν*."

At every act of inspiration, on laying the hand on the left umbilical region, about two inches, or two and a half inches, from the navel, in a transverse direction towards the spine of the ilium, a sensation is felt as if some liquid was forcibly spirted, or dashed, against the peritonæum; but on expiration this is less perceptible. This curious verberation is not always confined to the above point of the abdomen, as it will often be found two and a half or three inches from the navel, in the direction of the spleen; and, during its presence, the patient seldom complains, either of pain in the part, or any on moderate pressure; or even from change of posture; but provided, however, the part be suddenly pushed by a moderate force, great pain is felt in the region of the stomach, insomuch as to cause fainting;—a circumstance that more particularly happens, when

* On asking a little boy, seven years old, what this sound resembled, he immediately replied, it was like unto a frog in water.

the pulsation approaches the stomach. A pain, also, is frequently perceived in one, or both, of the iliac regions, which, as the disorder advances, becomes more distressing, as will be hereafter more particularly noticed.* There is seldom either tumefaction or discoloration to be observed in these parts of the abdomen; but the hypogastrium is generally swollen, when the disease has made some progress, especially in the evening and fore part of the night; but, in the morning, the enlargement has nearly or altogether vanished, leaving, in some cases, a degree of soreness in that region.†

On continuing the examination, from the point in the umbilical region already mentioned, along the spine of the ilium, in a transverse direction towards the loins, seldom much pain, or soreness to the touch, is met with; except in a few instances, when the seat of the irritation will be found a little above the most prominent part of the ilium; but, on forcibly pressing with the fingers on each side of the spinous process of the third or fourth lumbar vertebra, from above, considerable pain will generally be excited, insomuch, as occasionally to produce a degree of sickness, but seldom so great as to deter the patient from undergoing a second examination. The seat of this pain is confined to no particular dimensions of space. It is sometimes found in the fourth, but perhaps oftener between the third and fourth, lumbar vertebræ.

* Cases iv. v. viii. ix. x.

† Cases i. iii. x. xi.

CHAP. II.

Detail of Symptoms continued.

THE symptoms already described, though insidiously undermining the powers of life, often continue a considerable time, with little apparent increase, and without any alteration in the structure of the spine; but the patient, at length, will experience a farther increase of weakness and systematic derangement. His complexion will become more sallow, or ex-sanguine, and his spirits more depressed. In short, there will be an aggravation of all the symptoms hitherto present. The spine, at the place above described, will now be found giving way, and either slightly projecting anteriorly or to the left side. In the latter case, it will not often remain long stationary, as it will soon take a further lateral or an oblique direction, by inclining somewhat forwards, and sideways; and, by pressing on the posterior part of the ilium, will cause the anterior spinous process to protuberate a little in the same direction. In consequence of this incurvation of the spine to the left side, the right hip has the appearance of being enlarged, by reason of the hollowness between the ilium and vertebral column being increased.

In proportion as the distortion takes a lateral di-

rection, that portion of the abdominal contents which is more immediately attached to the spine will be carried along with it. Hence the reason why, in such cases, the left hypogastrium is more swollen than the right, especially in the evening, when the distortion is generally greatest, from the erect posture of the body during the day. The ribs, on the same side will protuberate, though the patient may still lie better on it than on the other; for, in the early stage, he can seldom rest on the right side. The consequence is, that this indulgence almost invariably increases, or accelerates, the distortion, as will be noticed more particularly hereafter. It generally happens, however, soon after the ribs protuberate, that the patient is rendered incapable of lying even on the left side, which he may have long preferred, from pain in the part.

If the spine continue to advance in this lateral direction, the upper part of it may, at length, take a counterturn, and point towards the right scapula, which, together with the superior and subjacent ribs, will be pushed outwards; and, if the distortion at this point be considerable, the head and cervical vertebræ will incline somewhat to the left, or adverse side.

Sometimes the distortion will advance directly forwards, and remain stationary for a long time; in which case, the muscular substance of the sacro-lumbalis and longissimus dorsi, on each side of

the lumbar vertebræ, will be elevated above the spinous processes, so as to form a deep and narrow sulcus between them. This is more particularly obvious, when two or more of the bones are displaced. If, from this state, the distortion take a lateral direction to the left, the spinous processes will be found buried behind the thick extensor muscles, so as scarcely to be felt; unless the spine is bent forwards, and to the left side.

If the distortion be forwards only, the ilia will sometimes be projected sideways, and somewhat anteriorly, and the distance between each, being greater than natural, fails not to alter the appearance of the hips; for, instead of a hollowness on one side of the spine, as already mentioned, there is an equal and uniform depression on both sides, and greater than what is natural. The contents of the lower part of the abdomen are now thrown forwards, a circumstance that sufficiently accounts for the uniform swelling of the hypogastrium, that is for the most part aggravated in the evening. If the patient have an upright spine, as is commonly the case, the middle part of the dorsal column is now thrown backwards, and the cervical vertebræ make a counter-bend forwards, with the head either vertical, or reclining somewhat backwards.*

By taking a side view of the patient, we shall find the spine exhibiting a double sigmoid shape,

* Case iii.

thus ξ ; but it sometimes happens, when the dorsal column forms a large segment of a circle, that the middle of it will project considerably backwards ; in which case, both the neck and head will incline more or less forwards. Here the spine adopts the single sigmoid form, not dissimilar to the letter ς . These alternate modifications in the structure of the spine are necessary for preserving its equilibrium. For example, if the lumbar vertebræ be pushed forwards, the middle portion of the spine will be thrown backwards ; and, were not the neck and head, or at least the former, to point in a counter-direction, the equipoise would be destroyed ; but Nature, if left to herself, is always provident in the means of maintaining this equilibrium.*



CHAP. III.

Further and Anomalous Symptoms, and Termination of the Affection.

IF the distortion continue to proceed laterally, farther symptoms of organic derangement are often present. The patient now begins to throw up, or regurgitate, part of the little nourishment he takes immediately on swallowing it ; and this vomiting is often attended with pain and uneasiness in, or

* See Cases xi. and xxxviii.

tightness across, the stomach; he is, also, more incapable of taking loco-motive exercise.* The symptoms of irritation and derangement in the pelvis also become more manifest; and pain, or soreness, is not uncommonly felt about the middle and lower part of the hypogastrium; a slight pain is also experienced on micturition. The urine now frequently lets fall a mucous deposit, sometimes of a lateritious tinge, (a circumstance often observable in the middle stage of this disease,) or occasionally emits a supernatant pellicle.

Such is the state in which the patient may continue some time, with little variation; after which the complaint will assume rather a different character: as the remissions and exacerbations of fever will be more clearly marked; rigors, or rather that constant sense of chilliness in the day-time, will become less present; and, in lieu of which, there will be an increase of heat, together with more thirst, and some additional fur and yellowness of the tongue. The pain, also, in the head, stomach, side, &c., which hitherto has but occasionally been considerable, will now become more frequent and distressing.

At this period of the complaint, if dyspnœa and cough, with hæmoptysis or hæmatemesis, have not already appeared, which is often the case, they now generally supervene, and are succeeded or attended by diarrhœa, alternating with partial night-

* Case i.

sweats, particularly about the head and breast, although the skin previously, during the illness, may have evinced rather a defect of insensible perspiration. The pulse, by this time, is quickened, more and more concentrated, and ranging from 110 to 120, or upwards. The urine is high-coloured, and loaded with a muco-purulent settlement. The tongue, also, under the circumstance of diarrhœa prevailing, will often be denuded of its wonted incrustation, and appear crude, as if flayed or deprived of its papillæ. The above colliquative evacuations fail not, eventually, to reduce the unhappy sufferer to the last extremity of emaciation and weakness; but such is the conservative principle in the animal economy, that the vital powers, though nearly extinct, will resuscitate, and again be reduced to the lowest ebb, before the last remaining spark disappear.

It often happens, however, that the patient will labour under a sympathetic and *hacking* cough, with dyspnœa, and frequent returns of hæmoptoe, for a long time, till reduced to the last degree of debility, before the nature and appearance of the expectoration indicate ulceration within the chest; and this circumstance is the more extraordinary, when it has been known, that a person so affected has laboured under a scrofulous diathesis, and been subject to repeated attacks of pulmonic hæmorrhage; to which, in one case, ascites succeeded.

On the other hand, it is occasionally, though rarely, observed, that the patient, instead of lingering out a miserable existence, terminates it unexpectedly by a sudden death, before the constitutional powers are much impaired, though not till after deep-seated disease has existed for some time; marked by a furred and yellow state of the tongue, especially towards its base; and, in one case, some time previous to the fatal event, with a slow and full pulse.* In the course of a long practice, I have only seen two of these cases, (to one of which I have no notes to refer,) exclusively of Mary Gibson, who died suddenly in childbed; but the particulars of whose death I have not yet satisfactorily obtained.†

Whether these unexpected changes were occasioned by effusion, or extravasation, in the theca vertebralis, I cannot say; but, that effusion does sometimes happen, and occasion sudden death, when disease is confined to this part of the spine, has been incontestibly proved by Mr. Chevalier.‡

The noise within the abdomen, which generally continues to increase, will often, in proportion to the distortion, be farther augmented, both in sound and duration; and, as soon as the patient, from weakness, is incapacitated from remaining erect, it will, in this advanced stage, frequently return, even while he remains in the horizontal position.

* Case xii.

† Case x.

‡ Medico-Chirurgical Transactions, Vol. iii. p. 102—106.

The above are the general and most prominent symptoms, that usually attend this affection; but there are others which are occasionally present, such as the alternation of pain in the head and lower extremities, which is often distressing. In one case,* the patient could not rest in bed, as long as the head and shoulders were raised higher than the rest of the body; but, when the lower extremities were elevated on the same plane, or higher than the head, she found the most relief. Sometimes a catching or convulsive twitching of one of the lower extremities, in the evening, or when the patient is in bed, will seize him; and this is no unusual occurrence. A vitiated taste is sometimes perceived, particularly in the morning, and much stupor is present in the day-time. The cephalæa, which is severe on rising from bed in the morning, insomuch as sometimes to excite vomiting, will continue unabated an hour or two, and directly proportionate to the quantum of sleep the patient has enjoyed. Costiveness, so long present, now alternates with diarrhœa; and the former is accompanied with a most distressing tenesmus. For instance,—frequent, though ineffectual, attempts will be made to obtain a motion for several days; and, at length, a number of small hardened and slimy lumps, or scybala, either separately or connected together in a chain-linked form, similar to sheep's dung, will be voided. To these succeed liquid and

* Case iii.

sanious stools, of various colours, and of a frothy consistence, always extremely offensive, and now and then assuming a different form, being flattened, or of a tape-like shape.

In two cases,* while the patients were labouring under obstinate constipation and tenesmus, and previously to the commencement of diarrhœa, there was voided along with the stools a great number of small substances, resembling cheese-parings; few of which exceeded in size half a sixpence, but were rather thicker, and appeared to be hardened lymph or mucus. Some of them were folded up, like unto tea-leaves.

Not only does hæmoptysis occur in the hectic stage of this disease, but the patient is subject to hæmorrhagic discharges from some of the emunctories.† Hæmatemesis, in more cases than one, has occurred.

The varied state of the bowels, above described, seems to have little influence either in augmenting or diminishing the noise within the abdomen. The pain, however, in the left side, either at the point where the verberation is felt, or in the iliac region, and which at this period is very afflicting, and indicative of impending suppuration, or the actual formation of matter either externally or internally, is generally aggravated by costiveness, and as often relieved by a return of the diarrhœa.

* Cases iii. iv.

† Cases iv. vii. xi.

When suppuration forms internally, this pain is subject to remissions and most violent exacerbations; and sometimes the part, just below the margin of the false ribs, which is generally the seat of the pain, will be retracted internally, so as to exhibit an increased hollowness between the ilium and that part. The aliment now taken into the stomach, although it still may abate faintness, or silence the ventral noise, (though it will sometimes fail to produce the latter effect at this stage of the complaint,) will excite pain in the side, that is aggravated in proportion as the peristaltic motion of the intestines is increased; and, consequently, the patient is sometimes afraid to eat, by reason of the pain being increased soon after swallowing: a circumstance which he attributes to the victuals passing a straight and sore part of the gut.*

As the disease advances, the catamenia become paler and less in quantity, appearing sometimes at extended periods, and of a purplish or darker colour; and, just before the time of menstruation, the noise, pain, and tumefaction of the abdomen will often be augmented.

Stricture in the gut is only an occasional attendant, and seldom suspected till the disease has made considerable progress. It is often discoverable about the time suppuration is apprehended;

* Case iv.

for, while the disorder is in the nascent state, no such symptom ever appears,—consequently cannot be productive of the noise which has so long preceded it, and which necessarily cannot be considered as an indication of it.

On a review of the above diagnosis, it is evident that this complaint assumes different shades of character; but, from its rare occurrence, few opportunities are afforded for delineating all the varieties necessary for establishing an accurate nosology. The above, however, is intended as a general outline, and referable to the complaint when strongly connected with a scrofulous diathesis, and left to the operations of nature. There are instances, however, though few, when this malady is arrested, either by some constitutional efforts, or other means independent of art; but, to effect a permanent cure of the noise within the abdomen, an amendment of the general health, and the removal of distortion and disease of the loins when present, become a *sine qua non*.

The progress of this affection is not unfrequently so exceedingly slow, that scarcely any perceptible alteration is apparent for many months, or even some years; and, during this period, the inflammatory symptoms are so obscure, joined to the circumstance of the noise being often aggravated by the passions of the mind, that both patient and medical attendant are too apt to conclude that the complaint is dependent on some derangement in

the nervous system ; and, after a while, when symptoms indicative of its real character are more clearly developed, this change is attributed to a cachectic or bad habit of body.

It is also manifest that this affection may properly be divided into two stages,—namely, inflammatory and suppurative. As long as it is confined within the limits of the former, and the proper curative means are pursued, a happy termination, so far as relates to the general or constitutional symptoms, may be expected ; but if, however, the disorder be advanced into the latter or suppurative stage, and especially if attended with a carious state of the bones, doubts of a favourable issue are to be entertained : as age and habit of body must always be taken into the account, particularly the latter ; for, if the patient be not past the age of puberty, the greater will be the prospect of recovery.

The above pathological outline, though necessarily imperfect, will, however, convey some idea of the nature of this insidious and most formidable disease, which, undoubtedly, will be considered spinal, though attended with some peculiarities not common to any other species ; such as the noise already described, and which, though designated by a new name, may perhaps only be the pathognomonic symptom that usually characterizes this variety of spinal disease. The author, however, notwithstanding that all the cases in the Appendix,

illustrative of this affection, associate this species of ventral noise with the disease of the spine, yet entertains some doubts whether the former is *always* dependent on the latter, under the limitations before stated; for, in Case ii. where stridor abdominalis returned after a long interval, and was well marked, there was neither any constitutional irritation nor apparent affection of the spine. In a second case, tolerably marked, and attended with anorexia, great languor, and some degree of febrile excitement for many months,—symptoms which were thought to portend either the presence or approach of spinal disease,—yet this could never be detected; and the noise left the patient without the assistance of art, but not before a general amendment was observed.

CHAP. IV.

Further Account of the History of Stridor Abdominalis.

NOTWITHSTANDING some of the ancient physicians, as already observed, and others of a more modern date, evidently glance at this disease, yet it is rather a matter of surprise that no one has given us a more extended nosology. Their opinions, as touching the cause and seat of the complaint, were, however, not more incorrect than those maintained by some of the moderns ; who generally refer the cause to dyspepsia, or depraved digestion, or to some peculiarity in the nervous system. Others attribute it to some affection of the kidneys, or to obstructions, or stricture, in the intestinal canal.

Although it is probable that both Hippocrates and Galen allude to this disease, yet Aretæus and the Arabian physicians do not seem to notice it ; nor do I find that Celsus mentions it. Some later writers, however, more particularly describe it ; but in such a manner as to shew that they had no correct idea, perhaps, of its real nature or character. Among these are Sennertus,* and Bonetus

* Alluding to wind confined within the duplicature of the omentum, he says:—*Flatus etiam in ea contineri extra dubium est, ob quos cum abdomen comprimitur aut venter attollitur vel deprimitur, sonus manifestus percipitur;—novique studiosum qui quoties manu sinistram hypochondrium comprimit mani-*

in particular ; the latter of whom refers to it under the title already quoted. This author also mentions a peculiar affection of the spleen, to which he gives the appellation of *Lien verberans*, or verberating spleen ; which is accompanied with a great noise, and displays so many similar traits of character, as to warrant a supposition that it is nothing but the disease more immediately under consideration. Indeed, he seems decidedly of this opinion,* and gives us a curious case from *Tulpius*,

festus sonus etiam ab adstantibus percipitur.—Sennerti Pract. lib. iii. p. 5, sect. 2, cap. 2.

Iterum—

Homines quamplurimi abdomen vicissim attollendo et comprimendo motum imo strepitum effatu dignum excitant, qui non aliunde procedit quam ex flatibus intra duplicaturas omenti conclusis, qui ex sufflatione elisi obstrepunt, et circum claustra fremunt : sic in equis succussatis, et in ilia ducentibus, aut saltu progredientibus ventrem resonare obaudimus, ob flatum abdomen conclusos et obstrepentes ; nec aliunde causa *εργασίμων* repetenda quam ex flatibus intra omentum conclusis, artificioso ventris motu collisis : vidimus quibusdam virginibus et mulieribus quibusdam splenicis et jejunis et saturis ventrem importune resonare et obstrepere, inde manant fluctuationes et rugitus ventris compressis et sublatis hypochondriis.—*Ibid.*

* Et non raro accidit ut humoribus, imo et flatibus in hisce locis cumulatis lien frustra accusatur, materia in omento consistente, et sæpe abdomen in sinistra parte versus umbilicum in tumorem attollente : accidit etiam nonnullis ut dum ventrem comprimunt vel attollunt, aut moventur, sonum et strepitum quendam in ventre audiant, quod evenit ob humores et flatum in hac omenti cavitate conclusos, hosque nonnulli *εργαστημους* appellant.—*Boneti Anat. Pract. lib. iii. obs. 25.*

under the title of *Lien verberans*, where there was a beating in the region of the spleen, accompanied with a noise which he heard distinctly at the distance of more than thirty feet.*

The above authors sufficiently satisfy us that they must have frequently met with this complaint, notwithstanding the summary and very limited diagnosis they give us; but the cause which they assign for it is so exceedingly problematical as to entitle it to little attention in this age of improved science.

Notwithstanding the scanty information which we glean from the ancients, I am not acquainted with any modern author who throws additional light on this subject. Indeed, I scarcely know of any one that even notices it, save as an occasional symptom of depraved digestion, or of such other diseases as have been already enumerated;† though, sometimes, when arrived at a certain stage, it will assume the character of the *colica callosa* of Cullen, and I suspect has often been confounded with this species of complaint, concerning which, however, authors afford us little information.

The note in Hippocrates, referred to at the commencement of this work, although evidently pointing at this disease, is so brief that we can infer nothing satisfactory from it, either as touch-

* Vide Boneti Anat. Pract. lib. iii. obs. 16.

† Since this work was written, I have heard of Mr. Copeland's publication on Spinal Disease, but have not yet perused it.

ing the cause or diagnosis of the complaint. That there is in the bowels, or within the abdomen, a croaking noise, is indisputable ; but that it is occasioned by wind and liquid fæces, pent up in consequence of a contracted passage, is not equally manifest : for, in the major part of the annexed cases, there were no symptoms of contraction ; and, although in two cases* it was present to a considerable degree, yet it was not the cause of the noise, as the latter had existed a twelvemonth at least previously to any signs of the former. A third case of stricture is also within my recollection, which terminated fatally, as the patient died tabid ; exclusive of Case x. where something of the kind existed. These few cases, out of the number of at least thirty or forty, which have occurred in the course of nearly forty years' practice, are a small proportion ; but it is possible that symptoms of stricture might have been present in some stage of the complaint, when not under my care : for it frequently happens, especially among the lower classes, when labouring under affections which do not speedily give way to medical treatment, that a second or a third practitioner is consulted ; who is at length supplanted by some famous empiric, who will not fail to impose on the credulity of his patient, by telling him that he has got toads or frogs in his belly. " Well, to be sure,

* Cases iii. iv.

(observes the patient,) I have often thought, from my own feelings, and from the nature of the sound, that I must have something of the kind within me!!” Henceforth he is so fully under the government of this delusion, that time, and no small share of address, are necessary to undeceive him.

From the preceding observations, we are justified in inferring that stridor abdominalis may be present without any apparent symptoms of a contracted gut; and that the latter may exist without producing the former, is also equally certain, though the author has seen more than one case of contracted rectum, where the passage was nearly obliterated, and attended with dreadful pain and distress, and with a loud roaring noise of the bowels; but, whether this was under the government of respiration, he is not equally certain. On inspecting the body after death, however, a large quantity of liquid fæces was found, and the intestines bore marks of inflammation.

Constipation of the bowels, or tenesmus, either jointly or separately, is no certain indication of a contracted gut; for the former is a general attendant on spinal disease, and the latter may be occasioned by sympathy, from the same cause. but, when obstinate costiveness alternates with diarrhœa,—when there is a troublesome and distressing tenesmus, with mucous stools, as already described,—and when the volume of the fæces is such as indicates their having passed a narrow part of the

gut,—we may then rest satisfied with the existence of stricture.

The peculiar stridulous sound in the urethra, on micturition, above referred to in the note, as well as alluded to in the text of Hippocrates, is a very rare occurrence. A case of this kind, however, is published in the 39th Number of the Edinburgh Medical Journal, which was found to be occasioned by wind passing from the rectum to the bladder, in consequence of adhesion, and ulceration supervening to the distortion of one of the lumbar vertebræ forwards. Petit also gives a case of this kind.* No similar affection of the urinary organs has occurred in all the cases of stridor abdominalis that have come under my notice.†

* Œuvres Posthum. tom. ii. p. 93.

† This rare occurrence is probably alluded to by Dr. Ferriar, in the following quotation from his works:—

“Chronic diarrhœa often precedes symptoms of ulceration in the bladder. This may, perhaps, be reckoned a case of sympathy; but the appearance of conversion is as striking as in any other instance. A discharge of flatus from the urethra, however, attends this kind of diarrhœa, and should give intimation of the latent disease.”—*Medical Histories and Reflections*, vol. ii.

CHAP. V.

Causes of the Affection.

THE remote cause of this affection may be considered as generally originating from scrofula, combined frequently with a disposition to spinal disease, which is favoured by the natural conformation of the body, and by a certain period of life, which is conducive to it; for, although, in most of the subjects of the annexed cases, there were no external marks of scrofula, yet there were sufficient proofs that they had descended from parents, or had near relatives, who were strongly tainted with that disorder.

The proximate cause, perhaps, is somewhat less clear; though generally depending on a certain part of the spine in a diseased state, under circumstances already described, occasioned from constitutional, but more particularly from mechanical, agency. And, as a proof of the close connexion of cause and effect between the spine and stridulous noise within the abdomen, I have never seen the latter to exist, when tolerably well marked, for the last seven years, when the former was absent, or without its having previously existed, excepting in the case above alluded to; but the former sometimes exists when the latter is not

present. This variation may be referred to the circumstance of age and sex, combined, perhaps, with some other latent cause, with which we are unacquainted: for those most liable to the complaint are from the age of twelve to thirty years, and perhaps half of this number are betwixt the age of eighteen and twenty-two. I have never met with a case above thirty years of age; but have seen several, from this period of life to sixty or upwards, where there has been not only disease, but distortion of the spine anteriorly, at the point affected, which often accompanies this stridulous affection of the belly, yet nothing of this noise has been perceived.* Hence we may infer, that disease, or distortion, in a certain part of the loins, does not always occasion it.

Females, who are under boarding-school discipline about the age of puberty, and rigidly subjected to it, by being compelled to sit many hours in the day with the head erect, and the shoulders thrown backward, are obnoxious to it;

* I lately saw a porter, aged sixty-four, who, five years before, had the misfortune, whilst carrying a heavy load on his shoulders, to fall down into a cellar: the consequence was, not only a violent sprain of the loins, but enuresis, and a partial paralysis of the lower extremities,—for which he subsequently found no relief. In addition to these symptoms, he had fever, a brownish and furred tongue, and colliquative diarrhœa,—which in a short time terminated his existence. The third and fourth lumbar vertebræ were distorted forwards, but there was no stridor.

especially if the circumstance of having a long spine, and a large head, chest, and upper extremities, be present : hence the sufferer can scarcely fail having pain in the loins, without the means of relieving it ; and, if we take into account the abominable custom of abridging these unfortunate victims to boarding-school avarice, of the quantity of nutriment which nature more particularly requires at this period of life, we may cease to wonder either at disease, or distortion in the loins which accompanies this affection, being the consequence. Not only this long-continued posture, to which the discipline of a boarding-school subjects young females, but any occupation where the lower part of the spine is bent forwards, and the shoulders at the same time thrown backwards,* with an increase of the superincumbent weight, will dispose to this complaint. Hence, we sometimes find young girls, who are nurse-maids, and of a slender form, that are in the daily habit of carrying heavy children in their arms, or those who have borne weights on their heads, are subject to this malady.†

Sprains and injuries done to the loins may be ranked as no unfrequent causes, by occasioning slight and periodical returns of pain in the injured part, which is further aggravated by the operation of mechanical causes, as well as from a constitu-

* Case ii.

† Case viii. xiii.

tional bias to disease. These pains may continue slowly to increase, insomuch as to be apparently stationary for a considerable time, without manifesting any, or at least very little, constitutional derangement, before symptoms of stridor abdominalis supervene.

I have never seen more than four male subjects labouring under this disorder, when well marked; three of which were about the age of puberty, and of delicate constitutions, when they were first attacked with the complaint. In one of these cases, a very large tumour, apparently of the encysted kind, formed in the left side, exactly at the point where the verberation was most perceptible; and which, after several months, broke, and discharged about sixteen ounces of purulent matter: soon after this rupture, colliquative diarrhœa and night-sweats, together with cough, hurried the unhappy sufferer to his grave. In the second case, there were evident signs of internal suppuration, with a similar train of hectic symptoms; which also proved fatal. The third was the case of a collier, a patient of my friend Mr. Balme, now resident in town. His countenance displayed a carbonated aspect, and he was far advanced in the suppurative stage of the disease,—as appeared from ulcerated lungs, colliquative diarrhœa, &c. He had laboured under pain in the loins, attended with stridor abdominalis, for nearly two years, and the third and fourth lumbar vertebræ seemed to jet

some little forward ; but I could not perceive any loss of bony substance. In most of these cases, no signs of a contracted gut were remarked.

Borborismus, arising from hysteria, worms, &c.* is easily distinguished from this disease: the former having a gurgling sound, which is, perhaps, the most frequent whilst the patient is in bed ; whereas, the latter is always governed by the action of the diaphragm, and seldom perceptible when in a horizontal posture, and therefore easily discriminated from the former. We often meet with a slight croaking of the bowels for a few seconds, which returns frequently, but this may not be connected with any spinal disease nor systematic derangement ; and may be considered as spasmodic, though under the control of respiration. It is, however, not only sometimes a prelude to the commencement of the disease under consideration, but is often an attendant on other spinal affections ; especially on distortion, or displacement of the upper lumbar or lower dorsal vertebræ ; and may be considered spurious. Hence, the young practitioner may always suspect some complaint of the spine, when this kind of noise prevails in conjunction with other symptoms indicative of it.

The beating in the abdomen can scarcely be

* Bonetus gives us the case of a person who had great pain and rolling of the bowels, attended with a murmuring sibilous noise, for three years, in consequence of a plum-stone lodging in the colon.

mistaken for the abdominal pulsation mentioned by Haller, and some others, or the *palmus abdominalis* of Dr. Young, who gives us several references in his able work on Medical Literature and Nosology; though I suspect they have been sometimes confounded: but, in this latter affection, the pulsation is confined to the course of the abdominal aorta, and is, as well as in cases of aneurism, constant and without croaking.

The circumstance of leucorrhœa sometimes accompanying, or supervening to, this disease in the loins, tends to mask the real cause, as the attendant pain is too apt to be ascribed to the former source. This imposition is, however, more liable to be detected as soon as the accession of febrile symptoms becomes more distinct.*

In concluding these remarks, the author observes, that, so far from intending an accurate pathology, he only prescribed to himself the task of sketching a faint outline, or, at least, of throwing some light on a disease, perhaps, too little noticed. His inability,—the rare occurrence of the complaint,—and the want of opportunities of inspecting the bodies of those who died of it,—must necessarily limit his pretensions. Examining the abdominal cavity after death must be a desideratum, in order to ascertain the state of the parts most likely implicated in this disease: for, although it is most probable that a diseased state

* See Case i.

of the spine is generally the sole cause of those extraordinary phenomena that constitute the character of the complaint, yet the circumstance of these being peculiar, only when well marked, to a certain part of the spine in a morbid state, attended with some other adjuncts, must render inspection doubly desirable. We may, however, suspect that no very material morbid derangement is likely to be found; otherwise there would have been some allusion to the complaint in such works as those of Baillie, Monro, Morgagni, &c.

CHAPTER VI.

THOUGHTS ON SPINAL AFFECTIONS IN GENERAL;
TOGETHER WITH THEIR TREATMENT, AS PREPARA-
TORY TO THE CURE OF STRIDOR ABDOMINALIS.

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Causes of Distortion of the Spine.

MR. POTT, who has written so ably on the subject of spinal distortion, seems to have had no idea of the frequent displacement of the lumbar vertebræ; at least, there is no mention of this occurrence in his publication: but, had this excellent observer attributed distortion more to mechanical causes, his views, by being more comprehensive, would have led to the detection of this variety of spinal disease, and induced him to have noticed it as a subject of too much importance to have been withheld. Indeed, it is rather a matter of surprise, as no surgeon ever had greater opportunities for observation, or reflected more than this gentleman, that the following corollary, deducible from observation, never occurred to him; namely, *in proportion as any part of the spine diverges, or recedes, from its centre of gravity, or is the more mechanically acted upon, it is the more liable to distortion.*

If this position be admitted, and which is consonant to experience, it follows that mechanical agency has frequently no inconsiderable share in the production of this malady; and, besides, the unexpected amendment in the patient's general health, as well as in external appearance, too sudden to be ascribed to the absorption of carious bony matter, on the superincumbent pressure being removed, is another evidence that indisputably proves the frequent existence of this cause, and the necessity of guarding against it.

To illustrate the truth of the above axiom, we need only to advert to the changes that occur in the form of the spine, in the interval between birth and puberty. At the former period, it assumes a curved shape, describing the segment of a circle, the point of which, the most mechanically acted upon, will be about the lowest dorsal vertebra,—a part, under these circumstances, the most liable to distortion. When the spine, however, acquires a greater degree of firmness, and assumes more of the sigmoid form, the middle part of the dorsal column will be projected somewhat backwards, and, forming an angle at the greatest distance from the centre of gravity, will be more mechanically acted upon than at any other part, partly from the head being thrown somewhat more forwards; but more especially from the little active agent employing his upper extremities in manual exertion. When, however, at puberty, the chest has become more,

expanded, and the bones and ligaments have acquired more firmness and solidity, these parts of the spine are less liable to distortion posteriorly. Next to this part, and about, or some time subsequent to, the age of puberty, when the sigmoid appearance of the spine is more fully formed, those lumbar vertebræ, which constitute the greatest angle anteriorly with the axis of the spine, are on this principle also exposed to displacement; but this cause is here oftener combined with others, which are principally accidental, than in any other part of the spine; as has already been, and will be farther, noticed in the succeeding pages.

Although this kind of agency in early life is frequently both the remote and exciting cause of distortion, yet, in middle age, it may be considered more as secondary, the primary cause then being often either constitutional, or arising from violence done to the part, to which supervenes chronic inflammation, that sooner or later terminates in distortion, which is accelerated by mechanical means, in proportion as the part is liable to be acted upon.

These observations on the disposition to displacement from a change of structure, are of little practical import, any further than to direct our attention more immediately to those parts which are the most likely to suffer from these causes.

Mechanical and constitutional causes, either singly or conjunctively, and differently modified, comprehend all the means that occasion this dis-

ease, and that give rise to all its different shades of character; and, as it will be impossible, when these causes co-operate, to refer to them respectively their different degrees of agency, it will be advisable to adopt such means as are calculated for obviating both. It was from not keeping this double end in view, that the practice of Mr. Pott was less efficient than it otherwise might have proved;—but this defect has been subsequently supplied by the sagacity of Sir James Earl.

The kind of physical agency above described, will not only either remotely or proximately dispose to distortion, but, after that event has taken place, will, *cæteris paribus*, mechanically exert a force in a ratio with the size of the curvature; and, as long as this agency is on the increase, no means, save that of suspending the inflicting pressure, will arrest its progress, or ameliorate the patient's health, till it has arrived at its *ne plus ultra*.

CHAP. VII.

On Mechanical Agency in the Cure of Distortion.

IF the superincumbent pressure act thus mechanically, in producing or accelerating distortion, the necessity of obviating it must be very apparent; and we need have no greater proof of this agency than the frequent endeavours of the patient to adopt such postures as are likely to afford himself relief; and no doubt it was this circumstance that first suggested the principle of such contrivances as have hitherto been resorted to. These have been multifarious, and such as suited the genius and views of mechanicians; but the most effectual, natural, and easy method of accomplishing this, is by adopting the horizontal posture; for, as long as the body continues in this position, the whole of the superincumbent weight will be removed from the diseased part. On the other hand, if any mechanical apparatus be substituted, it is difficult, though it may seem easy to the patient, to ascertain the degree of power necessary to be applied for suspending the superincumbent weight. To do less than this is only effecting it partially; and to do more, is stretching parts already perhaps in a state of disease and irritation, and consequently exposed to harm.

It is really surprising, in some cases of distortion,

when we have reason to ascribe the efficient cause to mechanical agency, to observe the happy effects of lying in bed ; especially if attended with symptoms of febrile excitement, accompanied with irritation and derangement in the thoracic or abdominal viscera, as insensible perspiration is thereby increased, the body becomes of a more equal temperature, and the rest of the suspended secretions are now restored ; the appetite also returns, and the patient grows plump and taller, with a consequent diminution of the curvature.*

There are, however, some objections which may occasionally be made against this remedy, but which may, perhaps, be considered more supposititious than real. For instance, provided the patient, in lateral distortion, be disposed to lie on one side only, as is often the case, seeing that he finds himself the easiest in this position ; especially in those instances, where the middle lumbar vertebræ, as above described, or several others above, are bent sideways ; the main weight of the body will then rest on the shoulder, hip, and superior ribs of the distorted side ; and the lumbar vertebræ, having no support beneath, will, partly from the weight of the abdominal viscera, which are attached to the spine, and partly from the laws of gravitation, be disposed to give way towards the side on which the patient lies. Moreover, the pressure of the superior ribs against the spine, at their articu-

* See Case xv.

lation, will have no inconsiderable share in increasing the curvature, from the force applied in this counter-direction.

Notwithstanding, however, that lying on the distorted side will often dispose to an aggravation of the complaint; yet, by keeping constantly in bed, the patient is more and more enabled to lie in any other position, from a diminution of irritation in the part; but which, as long as he continues in an erect posture, in the day-time, is considerably increased. Hence, on lying down, he will compose himself in that position which is most congenial to his feelings; but, if he persevere for a few days in regularly keeping the horizontal posture, he will often be enabled not only to change his position with comfort, but even sometimes prefer lying on the contrary side.

When, however, it is irksome to the patient, or he cannot be prevailed on, to adopt a position that is likely to obviate distortion, he may have recourse to other means for removing the superincumbent pressure, such as hereafter will be particularly mentioned.*—There is sometimes another objection, arising out of the difficulty of confining children to bed, who are often the subjects of spinal disease. When this intention is frustrated, a substitute may be had recourse to.

This plan of lying in bed, though strongly re-

* Mr. Baynton's restrictive plan, though never likely to be adopted in general practice, might here answer very well.

commended, yet, in some further instances, may be dispensed with ; such as when there is great relaxation of the solids, and the patient is in a state of apyrexia, (as is known by the state of the tongue in particular, as will hereafter be pointed out;) and, if the curvature, in the erect posture, be not powerfully acted upon, and the patient have the tolerable use of his lower extremities, some mechanical apparatus may be substituted. On the other hand, when symptoms of local and general irritation are present, and the curvature considerable, a proper horizontal position of the body is indispensable.

The propriety of lessening the superincumbent pressure will always be in proportion to the magnitude of the curvature, and inversely as to the strength of the patient. If there be great weakness and relaxation, if the head and upper extremities be proportionably large, together with a broad chest and long spine, and if also the distortion be considerable, the necessity of obviating this cause of pressure becomes absolute. Removing the whole of this weight, however, is not all ; for, if the distorted part continue to be mechanically acted upon, from any certain position of the body, a change of posture should be adopted. Mr. Baynton's plan, which certainly appears founded on the best principle, but which I have never actually tried, promises great advantages, under these circumstances.

CHAP. VIII.

Further Method of treating Distorted Spine.

As the last chapter contained some remarks on the power of mechanical agency, in occasioning, or influencing, distortion, the present will be appropriated to the consideration of some other *means*, which are often employed on these occasions, and at the head of which stand caustic-issues. These, from the authority of Mr. Pott, have been considered indispensable; of late years, however, practitioners have been a good deal divided in their opinions as to their utility. Some affirm the necessity of their indiscriminate use; whilst others dispute the efficacy usually ascribed to them, by alleging, that, if Nature be left to herself, the work of absorption will be accomplished, and a recovery ensue; and, in confirmation of this opinion, they adduce the circumstance of the poor often regaining their health without medical aid. This, however, is no fair statement of the question; which consists in, whether caustics possess any advantage over doing nothing; for, although it frequently happens that a complete cure will ensue, as regarding the general health, without the employment of any medical means, yet it does not follow, that, if caustics had been resorted to, the cure would not have been expedited.

To illustrate the good effects of caustics, we need only advert to the sudden and agreeable change, in many instances, soon after their application, and to the circumstance of the influence which a diminished discharge often has over the general health. On the other hand, as touching the recoveries which are occasionally met with, where Nature has been left to her own operations, we do not take into the account, the number that fall a sacrifice to the complaint, when unassisted by art; which may be considered, *mutatis mutandis*, much greater than when caustics are resorted to. It must, however, be admitted, that cases are sometimes met with, where caustics either evidently do harm, or are productive of no good effect. Hence, to point out the conditions under which their application would be serviceable, or the contrary, and to reconcile the discrepancy of opinion as to their general utility, are *desiderata* of no small moment.

Notwithstanding that all the shades of character which distortion assumes are dependent on mechanical and constitutional causes, yet the phenomena peculiar to this disease may be comprehended under two prominent varieties, denominated, in opposition to each other, active and passive. The symptoms constituting the former, are such as indicate general and local irritation. These are marked by slight accessions and remissions of fever,—often pain on pressing the curvature,—

pulse generally small, and somewhat accelerated,—urine rather high-coloured, especially in the morning, with a mucous deposit, frequently of a lateritious cast; but, in the latter stage, often higher and more turbid. The distortion is not large, and forms an acute angle, with considerable compression of the medulla spinalis, and its consequences; but the most pathognomonic symptom of this variety is a furred tongue, especially towards the root, and generally exhibiting a yellowish tinge, with little or no thirst. In the second variety, there is more general laxity of fibre, with a soft, and often a less contracted, pulse. The urine is paler, and mostly without sediment; the tongue, also, is cleaner, and there is no thirst; and the curvature is larger, more obtuse, and without pain; and the paralysis in the lower extremities less considerable; instead of which, however, there is great weakness, and some degree of torpor, especially on loco-motive exertion, or long standing. These varieties, it must be confessed, are sometimes so intermixed as to baffle all attempts at arrangement, and which may be accounted for, from the different combinations of the two grand causes respectively, producing corresponding diversities of character.

If the above distinctions be admitted, it is manifest that different modes of treatment are indicated. In the first variety, as the grand object will be to abate chronic inflammation and fever, caustics will

display their best effects ; especially if the progress of distortion be arrested, and no serious inroads made into the constitution. In addition to these, some cooling sedative, or alterant febrifuge,* which is calculated to lessen the fur on the tongue, and diminish febrile action, without debilitating, I have found to answer very well ; but, after a while, when the symptoms of chronic inflammation are lessened, the muriate of lime, or the sulphate of iron, either alone, or along with small doses of calumba, may sometimes be given with decided advantage. Under these circumstances, the tongue ought always to be our guide for determining on the administration of tonics ; for, as long as this is considerably furred, the most effectual means for the removal of such fur will prove the best tonic,—the utility of which may be estimated by the return of appetite ; therefore, any stomachic tonic that does not effect its purpose, by diminishing the fur,

* The following have often been given with good effect :—

Rx. Potassæ subcarbonatis, ʒfs.

Potassæ carbonatis, ʒij. solve in aq : font : ʒ vj. et adde

Spiritus ætheris nitrici, ʒfs.

Syrupi croci, ʒj. M. sumat cochl : ij. cum cochl : j.
succi limonis ter in die.

Rx. Magnesiæ sulphatis, ʒvj. solve in aq : puræ ʒ vj. et adde
syrupi caryophylli, ʒiij. M. sumat cochl : ij. vel iij.
larg : nocte, vel nocte maneque alvo astricto.

I may remark here, though perhaps unnecessarily, once for all, that, when the above medicines are prescribed, in the following pages, a milk and bland diet is understood to be enjoined ;—and, as often as tonics are ordered, some allowance of animal food is permitted.

is inadmissible; for, it is scarcely necessary to urge, that the criterion of improvement is an increase of appetite.

Although obstinate costiveness is no unusual attendant on this affection, yet purgatives ought to be given with a sparing hand; for here, where constipation is mostly accompanied with a want of appetite, and both are dependent on atony in the first passages, or on some visceral derangement, in consequence of distortion, an excess of alvine evacuation will always debilitate, without increasing the appetite. Indeed, as long as this continues indifferent, one easy motion daily, or every other day, or, even in some instances, twice a week may be sufficient; for, under these circumstances in particular, the principle of proportioning the *egesta* to the *ingesta*, is to be acted upon. All the means for removing torpor in the first passages, or for stimulating the hepatic, or chylopoëtic viscera, will often be unavailing, at least till the mechanical part of the cause be removed.

When a surgeon is called to a case of distortion, where symptoms of chronic inflammation are present, he will find a small and contracted pulse, somewhat accelerated, with a frequent sense of chilliness, without being succeeded by a corresponding degree of heat or perspiration, and with little or no thirst; in short, all the symptoms present will be such as indicate a defect of vital and nervous energy. Under these circumstances of apparent asthenia, he may adopt the tonic plan, with-

out conceiving that these symptoms are not only indicative of injury done to, or pressure on, the spinal marrow ; but that they obscure or conceal other symptoms of an opposite nature, such as local or chronic inflammation, and fever ; not dissimilar to that state which is sometimes observed in a certain species of strangulated hernia, where inflammation accompanies a diminution of vital energy. We seldom meet with a case of this spinal distortion where this defect is not apparent ; and it is most probable that this privation has influenced the judgment of some eminent men, who have promiscuously adopted the tonic plan of treatment.

Notwithstanding the good effects of caustics in this variety of distortion, yet the frequent application of a blister will be attended with equal, if not with superior, advantages ; as it produces, *a priori*, more clearly a double effect, not only by affording a discharge from the part, but, by every new excitement of pain, giving a fresh stimulus to the nervous system. The excessive irritation occasioned by the frequent repetition of a blister, will, however, always be an obstacle to its general adoption, as a great proportion of these sufferers are either children, or females, who seldom can be prevailed on to submit to its use for a requisite time.

Setons, notwithstanding they produce more distress, and a less discharge, than caustic-issues, when properly made, are sometimes advisable,

particularly when more convenient on account of situation ; but, as the grand object is to procure a copious and healthy discharge from the immediate neighbourhood of the disease, the latter, by comprehending a considerable portion of the superjacent integuments, will more effectually accomplish this purpose ;—but some farther remarks on the superiority of caustics will hereafter be adduced.—Leeches, or cupping, may also precede the adoption of these remedies, if there be pain or soreness in the distorted part on pressure ; but it is again necessary to observe, that, as long as the distortion continues in a state of progression, no remedy, neither internal nor external, will be of much avail.

In the second variety, where there is great relaxation of the solids, and less febrile excitement, the cure will consist of those means which are likely to give some tone to the system ; but here, as the curvature is generally large, and more under the influence of mechanical agency, and as the disposition to increase, before it arrives at its *ne plus ultra*, will, *cæteris paribus*, be in proportion to its size, the first intention will consist in obviating the efficient cause,—as little amendment, in other respects, is previously to be expected. If the curvature be not too large, nor the patient arrived at the extent of his growth, it will by these means diminish ; after which, tonics may be given with great advantage, and cold and sea-bathing may be resorted to. Should this plan, however, be had re-

course to at too early a period, before the above object be accomplished, the tone which is given to the muscles contiguous to the distorted part, may counteract its retrocession.

Not unfrequently, on an amendment of the general health, after the pulse has been for a considerable time in a sluggish state, and below the natural currency, a kind of re-action will ensue, inasmuch that it will be increased considerably both in vigour and velocity, and similar to that state of pulse which succeeds that species of strangulated hernia, above alluded to, after its reduction. This increased action will continue for a time, notwithstanding the patient all the while is obtaining strength and plumpness. This excitement in the arterial system is generally a favourable circumstance, and is inversely proportionate to its antecedent diminution.*

Although removing the superincumbent weight, *in toto*, so as to prevent the distorted part from being mechanically acted upon, is usually attended with the happiest effects in accomplishing a cure, if undeviatingly persisted in; yet this remedy does not always supersede the necessity of caustics, or some other drain; for, where there is primary or idiopathic inflammation dependent on a scrofulous diathesis, these, sometimes, will be found useful auxiliaries, and which I have seen applied with de-

* Case xv.

cided advantage, after the patient had been confined some months to the horizontal posture.

CHAP. IX.

The Cure of Stridor Abdominalis.

THE two last Chapters are intended as introductory to the cure of this disease, as well as some others of the spine, by shewing on what principle certain remedies are recommended ; and, as it has also been stated, *a priori*, of what these consist, under circumstances of local and constitutional irritation, the indications of cure for stridor abdominalis must be palpably obvious ; seeing that a certain degree of chronic inflammation or latent disease may be always present, and the cause of the whole train of concomitant symptoms, which has been proved, *ex posteriori*, from the success of those remedies, which are known to be powerful agents in subduing analogous diseases. Of these, leeches or cupping may be resorted to ; but caustic-issues, when properly made, stand the foremost, and will display the best effects. Without the latter, indeed, or some other external application, as a substitute, for diminishing local irritation, all internal remedies will be of little avail ; as I have several times had the opportunity of determining, by adminis-

tering such sedatives as were calculated for allaying constitutional irritation, with seldom much advantage, though persevered in for many weeks, or even months ;—whereas, when caustics have been superadded, a sudden and immediate change has mostly been the result ; as the croaking has either ceased from this time, or been greatly moderated ; the appetite has begun to improve, and the uneasy sensations at the stomach to diminish ; the tongue, also, has become cleaner, and the bowels, in a short time, less inert.—The pain in the loins, from disease, will often be no longer perceptible, as soon as that from the caustics is felt. This circumstance is not only peculiar to this, but other spinal affections.—Henceforth, if the disease be not too far advanced, the patient will gradually recover : the period, however, for effecting a restoration of health is of uncertain duration. In some instances, from two to six months, and, in others, from six to twelve months, or even longer, are required : much depending on age, habit of body, and the length of time the disease may have subsisted ; as well as on the presence of distortion, and the means adopted, as it will generally be requisite to keep up a copious and uniform discharge from the caustic-issues,—for any diminution, in this respect, is followed by a deterioration of health. Notwithstanding, however, that this discharge is attended with the best effects in subduing the disease ; yet, after this object is accomplished, a profuse drain

may sometimes be injurious, by weakening the patient, as I have seen in some instances,—for, after the issues have been dried up, he has obtained strength more rapidly. Perhaps the best criterion for lessening the discharge, in the inflammatory stage, is the state of the tongue, and increase of appetite from the use of tonics.

Under these circumstances, in order to insure a lasting cure, it will always be prudent to reduce the issues to a single pea or two each, for a considerable time previous to their being healed, after the disease is overcome.—The citrate of potass, already mentioned, may be persevered in, when the pulse and urine, but more especially the tongue, indicate febrile excitement. As soon, however, as these symptoms are diminished, or succeeded by a state of apyrexia, the muriate of lime, combined with some mild stomachic tonic, such as the calumba, may be given with good effects;—the sulphate of iron also, in a few cases, was very serviceable; but sea-bathing, when used at a proper period, is second to no remedy. If the appetite increase under the use of tonics, and there be no diminution or alteration in the state of the urine, these may be continued with advantage; but, when they, or any other tonics, are prematurely employed, the consequence will be such as might be expected, namely, a greater loss of appetite, with an increase of fever; and the patient will again call for, what he terms, his old medicines.

The above is the treatment recommended for stridor abdominalis, and which, in general, will answer well, both in abating the ventral noise, and ameliorating the general health, as long as the disease is confined to the inflammatory stage; and sometimes, even under circumstances of suppuration, these means will be productive of some unexpected advantage, as Case iv. will fully illustrate. When, however, the spine is distorted, and more particularly to the left side, and the superincumbent pressure is considerable, accompanied with a great loss of strength, either the horizontal posture, or some well-adapted mechanism, as Eagland's stays, (to be more particularly adverted to hereafter,) will be highly advisable; although, in the incipient stage of the disease, when the distortion is trifling, and the constitution little affected, the former will often disappear almost immediately, or soon after the application of the caustics.*

In proportion as this affection is dependent on mechanical causes, the good effects of the recumbent posture will be evinced, whether distortion be present or otherwise, and more especially, when these causes operate powerfully from the natural structure of the body, it will always be advisable to adopt it.

* Cases ii. v. viii.

CHAP. X.

FURTHER THOUGHTS ON SPINAL AFFECTIONS.

On Lateral Displacement of the Spine.

THERE is one species of spinal derangement which often has no inconsiderable influence on the patient's health, and too little noticed by authors in general, and which may not improperly be termed the lateral displacement of a great portion of the spinal column, which comprehends three varieties; namely, distortion, incurvation, and declination, of these bones. The first, for the happiness of mankind, seldom occurs, and consists of one, two, or more, of the vertebræ being thrown sideways, and forming an acute angle, sometimes at a considerable distance from the axis of the spine; and it is the form which this displacement assumes, that constitutes distortion more than any other characteristic attending it. The second is, where the spine is bent sideways, and in such a form as to resemble the small segment of a circle, thereby constituting the single curvature; but when the spine assumes the figure of a ϵ , it may then be denominated the double curvature. The third va-

riety is, when the spine inclines to one side, which in general is the right, without producing any material change in its structure, though this declination is often accompanied with some degree of incurvation of the superior dorsal vertebræ, increased, probably, from the position of the head and cervical vertebræ, which Nature adopts for preserving the centre of gravity. The right shoulder, if the declination be on the same side, will here be depressed, and the corresponding ilium somewhat raised. This approximation may, in part, be occasioned by the limb on the same side having a greater weight to sustain; and this increased action upon the *os innominatum* will not only elevate it, but enlarge the hip, and apparently shorten the limb, in the same manner as is observed in the incipient stage of the diseased hip-joint, where the sound limb has to sustain the principal weight of the body. Under the above circumstances, the great trochanter on the adverse side will generally be more apparent.* These distinctions, which have been thought necessary to be mentioned, are of no practical import, therefore will hereafter be little attended to.

When the middle of the spine is thus bent or pushed to one side from its natural situation, it will be productive of consequences sometimes serious to the patient, and no little embarrassing to the

* See Case xxxix.

practitioner, unless acquainted with the proximate cause. For instance, if some of the middle dorsal vertebræ be thrown to either side, supposing, for example, to the right, the pressure on the ends of the ribs will be such as often either to elevate the scapula, to increase the incurvation at some part of the ribs, or to protuberate the cartilages* attached to the sternum, all on the same side, and consequently to give an apparent enlargement to the anterior part of the mamma. It, however, not unfrequently happens, that, instead of these kinds of derangement being on the side toward which the spine inclines, similar protuberances will be observed on the adverse side, from the same cause; and, we sometimes find, in cases of incurvation of the spine, that the fifth, sixth, and seventh, or perhaps the eighth or more of the inferior ribs, will project under the scapula, which will be thrown to a greater distance from the spine, whether the latter inclines to the same side or not; in which case, the ribs on the opposite side will often protuberate anteriorly near the sternum, and the part be affected with pain and heat, alternating with a sense of coldness. The structure of the thorax now becomes materially altered, as it assumes more of the rhomboidal form, which often accompanies the lateral sigmoid flexure.

* The cartilages, however, are sometimes protruded from other causes.—Vide Morgagni, *Epist.* 7. No. 11. *Epist.* 45. No. 23.

The spine, by frequently assuming this lateral sigmoid shape, is often productive of great distress ; partly, from the unnatural pressure inflicted on certain parts, and partly from the increase of curvature, which renders it less capable of sustaining the superincumbent weight ; for, in general, when large, as soon as it leaves the sacrum, it takes a somewhat slanting direction to the left, and augments the distance transversely between the right ilium and vertebral column ; and, consequently, may give rather an enlarged appearance to the right hip. After arriving at, or a little above, the lowermost dorsal vertebra, the curvature takes a counterturn towards the right scapula. At the two inferior angles, formed by this new direction, there is sometimes considerable irritation ; especially at the lower, which is occasionally accompanied with some degree of local inflammation, which may generally be ascertained by the state of the tongue.

As this species of curvature now increases, the lower ribs on the left side begin to protuberate a little, attended with some pain at the most prominent point, which is anteriorly, and about, or a little above, the cartilaginous union of the false ribs. The pressure on the ends of the middlemost ribs, posteriorly on the adverse side, in consequence of this counter-direction, now becomes so great as sometimes to elevate the superjacent scapula prodigiously, from the increased rotundity of the ribs beneath, and to throw it to a considerable distance from the

spine. This protrusion under the scapula tends to give the rhomboidal form already alluded to.

But, instead of the spine assuming the sigmoid shape, in order to constitute the rhomboidal figure of the chest, it will sometimes lean all the way from the first or second lumbar vertebra, or even from the sacrum, up to, or beyond, the middle of the dorsal column, and in such a manner as to describe the small segment of a circle,—an occurrence frequently met with in practice. Here, also, the pain and protuberance in the side, before adverted to, are present; and which generally increase as the day advances; and, in the night, will often incapacitate the patient from lying on the same side.

When the convex part of this curve is considerable, and to the left, which is often the case, the right scapula or shoulder will be depressed, in proportion to the magnitude of the curvature, though the former may protuberate; and this circumstance, independently of pain in the side, is a good criterion for detecting this variety of spinal displacement. These two symptoms, taken conjunctively along with head-ach, and pains, and some degree of weakness or torpor in the lower extremities, are generally conclusive without an examination.

Sometimes patients, thus circumstanced, suffer much distress, either from pain, or a disposition to syncope, attended with a quick, and, occasionally, irregular pulse; especially those who are upwards of twenty years of age, and even when the curve is

so small as to render it doubtful whether this can be the occasion of it: but, if recourse be had to those means best adapted for lessening mechanical agency, all doubts on this head will soon vanish.

But it is occasionally found in these cases of incurvation of the spine, that the state and appearance of the scapula remain the same, or are very little altered; though, in lieu of which, the ribs at their middle will be rounded; but it oftener happens that their cartilages, either above or under one or both of the *mammæ*, are protruded, which gives to these organs an enlarged appearance, sometimes attended with pain or soreness; for which, leeching, blistering, &c. have been unremittingly employed, in some instances within my remembrance, for many months, but with no great advantage. Whence we may infer that, in the cases under contemplation, the approximation of the spine towards the scapula will not necessarily elevate or protrude the latter: this circumstance entirely depending on the increased convexity of the subjacent ribs.

Notwithstanding that lateral incurvation of the spine is seldom accompanied with any material defect in the lower extremities, yet, sometimes, a considerable degree of weakness is observed. Under these circumstances, the curvature, at its lower point where it begins to diverge, will sometimes be found, as it were, to rest upon a fulcrum; and, by thus acting obliquely on it, the consequence will

be, a very slight projection of the spine posteriorly at this point, and towards the other side. Blistering this part is sometimes attended with good effect.*

Sometimes, whilst lateral displacement of the spine is engaging our sole attention, disease of a more formidable character is insidiously going on in the lower part of the spine or sacrum, and may remain a considerable time before it fully develops itself, unless recourse be had to a careful examination; but this primary disease, independently of this change of structure, is occasionally accompanied with severe sympathetic pains in the upper part of the spine, which greatly tend to obscure or mask the former, that is only, in general, marked by transient pains in the part.

When idiopathic disease is present in one part of the spine, and attended with an alteration of structure in another, a compound disease is then formed, and to detect which becomes a matter of vital importance, as some of the following cases will fully illustrate.†

* See Case xviii.

† Cases xx. xxxviii. xli. xlii.

CHAP. XI.

Symptoms of Lateral Displacement of the Spine.

THE above are some of the principal changes which the structure of the thorax undergoes, in consequence of spinal derangement, and which, had the detail been more minute, would have proved of little practical utility. On the other hand, whatever symptoms are adduced as criteria for pointing out or discriminating these morbid derangements, will be of incalculable importance; seeing how many experienced and liberal-minded practitioners will not scruple, occasionally, to acknowledge and lament the time before they acquired a clear idea of the nature of these affections, and often to the irreparable injury of their patients.

The most prominent symptoms which usually denote the presence of this affection, are pains at the different points of derangement, but more especially in the side, and between the two scapulæ; and often at a point equidistant from one of these bones and the spine. This pain will shoot towards the sternum, or under the xiphoid cartilage; but the pain, perhaps, most characteristic of the presence of this disease, is perceived about the cartilaginous junction of the false ribs, on one or both

sides.* Notwithstanding, in some instances, the general health is little affected, yet it more frequently happens that cough and dyspnœa, especially

* The author has frequently known this symptom to have engaged the particular attention of practitioners of experience for a long time, and who have prescribed general and topical bleeding, blisters, setons, &c., with little or no advantage; he therefore strongly recommends an examination of the spine, especially if any other symptoms be present, which usually accompany its displacement. In a few instances, also, he has known the protrusion at this point so considerable against the integuments, as to cause great soreness and pain to the touch, that extended down into the hypochondriac and epigastric regions, and which leeches and blisters relieved for a season.

Dr. Ferriar seems to think that pain in this part, and in the hypogastric region conjunctively, are indicative of phthisis, connected with some disease of the heart. His words are,—"Pains in this situation (the hypogastrium,) generally accompany considerable chronic diseases in the heart. Dilatation of the heart is denoted by pain about the region of the bladder, just above the os pubis. The phthical sympathy occasions violent pain in one side, about the situation of the waistcoat-pocket in males. I have sometimes conjectured, that the pain in affections of the heart might be propagated along the course of the aorta,—internal sensation is so indistinct that it might be easily referred to a part anteriorly situated. Perhaps in phthisis the uneasiness may be propagated to the peritonæum, from the inferior process of the diaphragm."—*Ferriar's Essay on Digitalis.*

That the worthy Doctor has frequently observed these symptoms he describes, will not admit of a doubt; but that he satisfactorily accounts for them is highly questionable; for whoever has paid particular attention to spinal affections, will often have little hesitation in ascribing these symptoms, when taken in the aggregate, to a different cause; for without entering into any physiological disquisition, in which the Dr. seems to have entangled

on loco-motion, are present. These are either constant, or periodically supervene to frequent attacks of catarrh or pulmonic inflammation, which are mostly attributed to catching cold.

This affection, however, is marked by different shades of character, as the respective viscera are deranged or acted upon. For instance, when the ends of the sixth and seventh ribs, on the right side, are strongly acted upon by lateral distortion, as in Case xv. so as to cause them to project side-ways, there

himself, I can only assert, that in most of the cases I have met with, where there has been pain in the situation of the waistcoat-pocket, as well as irritation in the lower part of the hypogastrium, together with an enlarged or unnatural action of the heart, accompanied with, or apparently without, a dislocation of that organ, constituting, as may be supposed, what the Dr. not improperly calls a dilatation thereof, some displacement of the spine was present; and, generally, from its assuming laterally the sigmoid flexure, which seldom fails to alter the natural structure of the thorax, or by losing its perpendicularity at its articulation with the sacrum, it leaned to one side; or from distortion in the loins, where there is not only pain in the part, but which is communicated by sympathy to the lower portion of the hypogastrium; and this change of structure in the lower part of the spine laterally, is usually accompanied with a declination or incurvation of the dorsal vertebræ, that presses upon the ends of the ribs, and thereby disposes to this pain, about the situation of the waistcoat-pocket, as has already been demonstrated, and to phthisis pulmonalis.

These dilatations of the heart are, however, seldom very considerable when dependent on spinal displacement; on the contrary, when the diastole of this organ is greatly augmented, it often proceeds from other causes.

is great pain under or near the xiphoid cartilage, probably from the suspensory ligament being on the stretch in consequence of some displacement of the liver, whose functions are now altogether or nearly suspended,—as is known from no bile being secreted, and from the most obstinate constipation of the bowels, as well as from lead or ash-coloured stools. Anorexia, or apathy to food, is exceedingly prevalent; and all the rest of the secretions are correspondingly impaired. Under these circumstances, the tunica conjunctiva will exhibit the icteric tinge. Urine exceedingly scanty, high-coloured, and depositing a mucous sediment of a lateritious cast, containing little or no bile. There will be frequent attacks of pulmonic inflammation, which may last a few days or a week, during which the pulse will be considerably accelerated, though in the intervals often slow, languid, and feeble. On the superincumbent weight, however, being removed, a considerable degree of reaction, inversely proportioned to its depression, will ensue, with a return of all the suspended secretions.

But, when distortion presses powerfully on the ends of the fourth and fifth ribs on the same side, the consequence will be, independently of derangement in the respiratory organs, as well as the presence of most of the symptoms which usually attend this variety, an enlarged pulsation, or an increased action and dislocation of the heart, which is more evident on the right side of the sternum than

on the left, and more diffused than natural. Hence it is seen how spinal displacement may give rise to what some authors term a dilatation of the heart, which is often nothing else than a removal of this organ from its natural situation, accompanied with an increased diastole, and which is no unfrequent occurrence; and perhaps attends, in some degree, every alteration in the form of the dorsal column when its axis is shortened, as the heart thereby must necessarily descend, and, in cases of lateral displacement of the vertebræ, be removed more to one side.*

When there is great pressure on the ribs on the left side, which is not so often the case as on the right, from the incurvation of some of the middle dorsal vertebræ, periodical palpitations or dilatations of the heart will also occasionally be observed, together with organic derangement of the stomach, evinced by syncope, or sickness and vomiting; but the pulse here, as in most cases of enlarged action of the heart dependent upon, or connected with, a spinal cause, is seldom correspondingly altered by it at the wrist. In one case, however, when at 80, the diastole of the artery was greatly augmented; but, as phthisis pulmonalis progressed, this diminished in proportion as the pulse increased in velocity.†

This species of dilatation of the heart oftener occurs in consequence of the sigmoid flexure of the

* See Case xxii.

† Case xvi.

spine giving the rhomboidal figure to the thorax, by which the left ribs become elevated anteriorly ; and it comes on frequently, though at uncertain periods, and is equally of uncertain duration ; which, however, is seldom long ; but it sometimes returns several times in the course of the day, even when the body is in the horizontal position. The passions of the mind, and more particularly bodily exertion, will, however, have considerable effect in exciting a return of these paroxysms.

This increased organic action is seldom, however, extended to the arterial system in any material degree ; excepting to the subclavian, and lower part of the carotid arteries, and partially to the vessels of the head, as it will not only be observed by the touch, but by a sudden suffusion of the face, accompanied sometimes with pains extending towards the crown of the head, which succeed to, or are aggravated by a return of the palpitation. Hence, in every case of palpitation or dilatation of the heart, and especially when accompanied with an elevation of the ribs, or cartilages at the sternum, or with other symptoms that point out this affection, it will always be necessary to examine the state of the spine. Indeed, it is a desideratum of the highest practical importance, for medical men to make themselves masters of all the phenomena that usually attend, or indicate, spinal affections ; as it often requires no common share of experience and discrimination to detect them, unless the practitioner

has paid particular attention to this subject ; for it is evident, as long as there is no material defect in, or paralysis of, the lower extremities, nor apparent external deformity, we are seldom prone to suspect disease of the spine. The character of this variety of the affection may, however, generally be discriminated by attending to the following criteria, or more extended diagnosis, the most prominent symptoms of which have been already given.

When there is pain between the two scapulæ, and particularly near the lowest point of one of them, and which shoots along the course of the mediastinum towards the lower part of the sternum, or under the xiphoid cartilage, or into one or both sides anteriorly about, or a little above, the junction of the false ribs, and especially on the distorted side : if these pains be somewhat aggravated towards evening, and easier in bed, and the sufferer, at the same time, be incapacitated from lying or sleeping on one or both sides, and thereby constrained to lie on his back : if these symptoms be taken in conjunction with a hollow or hacking cough and dyspnœa, with occasional hoarseness, which are always aggravated by exercise and exposure to cold, with frequent attacks of slight pulmonic inflammation, or what is sometimes considered as fits of asthma, from being periodical, and putting on a spasmodic form : if there be a frequent, or quick and somewhat contracted, pulse, which is occasionally thready or irregular : if there be thirst, and the

tongue whitish and slightly furred, though not uniformly so, and less inclining to yellowness than in most other varieties of spinal disease : if there be cough, attended with a light and frothy expectoration, which is sometimes more troublesome in the evening, or on lying down at bed-time, than in the morning, or at any other part of the day : when the patient also is uncommonly liable to catch cold, and whose feelings are remarkably susceptible of it ; (a circumstance that may be considered as the pathognomonic symptom of spinal affections in general ;) together with occasional pains and weakness, or torpor in the lower extremities, on taking walking-exercise or long standing : if, also, the patient's neck appear somewhat shortened, so as to give him rather a stunted look ; and when there are periodical returns of palpitation, or a dilatation, of the heart, as well as a frequent disposition to syncope, or a sense of tightness or sinking at the præcordia, together with some degree of vertigo and pain in different parts of the head ;—then, or from a major part of these symptoms, the physician will have strong grounds for suspecting this affection, and will be justified in demanding an examination ; which ought always to be had recourse to with a certain degree of delicacy, otherwise he might expose his judgment to the risk of being called in question.

It sometimes, however, happens that few or none of these symptoms of irritation in the chest are pre-

sent, and consequently no constitutional derangement;—a circumstance that is referrible mostly to young people who are under the age of puberty, whose bones are plastic and flexible, and whose viscera are perhaps less capable of injury from compression than in riper years; yet, notwithstanding these favourable circumstances, the complaint is always of consequence and deserving of attention, otherwise the patient may remain gibbous to the end of his days; although sometimes, when inconsiderable, it will disappear spontaneously about the age of puberty.

This species of gibbosity, occasioned from an altered structure of the spine, is not only productive of disturbance in the respiratory organs, such as dyspnœa, asthma,* and other symptoms already enumerated, but eventually dropsy, consumption,

* Hippocrates says, that those who are gibbous from asthma and cough die before puberty.

Οκόσοισι ὕψοι ἐξ ἄσθματος ἢ βηχὸς γίνονται πρὸ τῆς ἡβῆς ἀπόλλυνται.

Whence it appears, that this accurate observer thought that gibbosity was sometimes the consequence of asthma and cough. And some commentators have endeavoured to reconcile this apparent incongruity by referring it to a typographical error. If *εξ*, say they, be changed into *εξω*, the sense will be altered, and satisfactorily account for the mistake. On the other hand, if we view the subject by considering that gibbosity, dyspnœa, and cough, may commence together, and that the two latter may be observed before the former, and that the property of the bones before puberty is flexible and yielding; and if we also take into the account the incorrect ideas which the ancients entertained as

or some other fatal disease,* which prematurely hurries the sufferer off the stage of life. Hence arises the necessity of arresting its progress *in limine*; and, to effect this, we must refer to both the remote and proximate causes, by first ascertaining whether there be any scrofulous taint, and what are the

to the cause of these affections, and the great probability that they referred them promiscuously to mechanical causes, is it not more than probable that they considered gibbosity sometimes a consequence of increased action in the respiratory organs?

That Hippocrates held the cause of this affection to be purely mechanical is highly probable; and we are borne out in this conjecture from the comment of Galen on this celebrated aphorism, who says, “*Gibba fit spina aliquando propter ictum aut casum, gibba etiam fit propter quædam tubercula dura quæ in parte anteriore consistunt*;”—but it will also be necessary to read the whole comment.

* In most cases of spinal derangement, a want of vital as well as nervous power is apparent. The pulse is diminished in natural tone and vigour, and the blood generally exhibits a more carbonized appearance, especially when circulating with difficulty through the lungs. There is mostly also a disposition to hæmorrhage, and a great proportion of the cases of *purpura hæmorrhagica*, which have come under the author's observation, have been attended with distortion. The worst case of rapid mortification he ever saw, was of a man about thirty years of age, of a bad habit of body, and whose countenance displayed something of the livid or purplish tinge, who had had the misfortune to have the fingers and metacarpus of one hand torn by some machinery used in the woollen manufactory. Light dressings and the saturnine lotion were applied, but on the third day the injured parts were found in a gangrenous state. The mortification now proceeded so rapidly, that, in thirty hours after this period, the whole arm and one half of the trunk were involved, when he died.

habits and regimen of the patient, as well as his usual pursuits or employment. For, if a scrofulous diathesis be present, or the *ingesta* be inadequate to the support of the body; or if, also, the sufferer indulge much in one posture; or if his employment be such as to engage one arm more than the other, and which often causes the trunk to incline to the same side; or if he have been some time accustomed to carry weights in his arms, and in one particular; or on one shoulder, or even on his head; then there will be cause sufficient, both remotely and proximately, for accounting for the presence of this bodily deformity.

It is not perhaps easy to determine whether this complaint, as a single and primary affection, is either occasioned or aggravated by sleeping constantly on one side, as we frequently see patients who are accustomed to lie on the same side differently distorted; but, when the derangement is the consequence of a counterturn, or from the lower part of the spine being bent to the contrary side, as already noticed, then lying on one side altogether will either contribute to increase or perpetuate this deformity.

Another cause, which may be considered as negative and fashionable at the present day, is the disuse of strong stays, which were formerly worn, and contributed towards obviating a more varied flexion of the spine, as well as affording a lateral

support to the trunk ; and we need have no greater proof of the truth of this supposition than the circumstance of stiff stays sometimes proving a remedy in this deformity, especially in its incipient stage, and before puberty.

CHAP. XII.

Cure of Lateral Displacement of the Spine.

ALL the usual means for removing pain and irritation within the chest are here of little avail ; for, although sometimes abstracting a small quantity of blood from the arm, and applying leeches to different parts of the thorax, as well as blisters, will afford a short and temporary advantage, yet almost all other medicinal means prove inefficient. Cautic-issues, however, when long continued, will mostly afford some relief for the dyspnœa and cough ; and blisters applied to the incurvated part of the spine, in recent cases, will sometimes be attended with advantage, both in a local and general point of view. Pectoral demulcents may likewise be given, yet with little expectation of obtaining more than palliative aid from them ; but the most effectual and permanent remedy consists in such means as are best calculated for suspending

the superincumbent weight, and giving, at the same time, lateral support to the spine. The body-part, together with the head-piece, of the spinal apparatus of Mr. Eagland, of Leeds, which is constructed on a good principle, answers this purpose very well. Indeed, I have often been agreeably surprised, after the patient has been harassed for some time with such a train of symptoms as is already described, to see how soon he has experienced relief from wearing these stays, and at his desire for continuing their use when apparently no longer necessary.*

From the first application of these, or any other

* *Eagland's Spinal Apparatus.*

The complete apparatus of this mechanician consists of a support for the whole body, and is so constructed as to pass under the heels, and upwards externally along each extremity; and is continued forwards till it finally rests under the arms, having every joint proper for motion, and opposite to, or corresponding with, the natural joints of the limb. The part from the hips to the shoulders embraces the whole body, similar to a pair of stays, and is made to fit with great neatness and exactness; and from the back part of which is placed a steel bow, or what he calls a head-piece, for the purpose of suspending the head. This enables the wearer to move the head at pleasure, and is so contrived that it may be placed higher or lower, or may be entirely removed, in an instant, by the wearer himself.

Notwithstanding the parts, which render this support, are composed of steel, yet they are so light, and exactly proportioned and fitted, as to be worn under the clothes without being seen, or even seldom suspected by the nicest observer.

This mechanism is well adapted for the worst cases of lateral

stays on the same principle, when the cause of the deformity is purely mechanical, it will always be requisite to attend to their adjustment ; for, if care be not taken to elevate them in proportion to the recession and consequent elongation of the spine, conjunctively with the growth of the patient, little benefit will be derived from them ; but, if they be thus attended to, especially if the patient be under the age of puberty, the spine, in a short time, will be elongated, and his growth, in appearance, suddenly increased.

curvature, as it supports the body in a proper posture when sitting ; and also, when standing or walking, the whole weight rests on the apparatus, in the same manner as on crutches, and which of course is thrown upon the ground : it also renders the wearer as easy, when standing or walking, as when laid down ; and supersedes the necessity of confinement to an inclined or horizontal posture, (unless advisable on other accounts,)—an advantage which imparts great comfort, as it neither disqualifies him from sitting, walking, or riding on horse-back, or in a carriage ; provided, however, it be applied immediately on rising in the morning, and worn while the body is erect ; and if, at the same time, proper attention be paid to its adjustment.

In cases where the curvature is slight, great numbers of young persons, as I can witness, have been restored to their shapes and health by the use of the body-part of this apparatus only, when worn instead of common stays, and laced on in front in the same manner.

Another advantage attending this mechanism is, that either the complete or stay part of it admits of being let out or extended very considerably, either in length or width, during growth, or the retrocession of the spine to its natural shape.

Notwithstanding the pleasing effects produced by the aid of this mechanism, yet, sometimes, these are less perceptible, as in cases of long standing, that are past the age of puberty, and where the parts are so firmly fixed as to be incapable of returning to their natural situation ; but even under these circumstances, provided there be not so great defect in the lower extremities as to require the whole-length machine, the body-part of this apparatus may be worn with some advantage, both on account of the support, and the partial suspension of the superincumbent weight, which it affords ; but it will always be advisable to exercise some caution in applying force to these parts, as their resistance will preclude them from bearing either much extension or pressure. Hence, how necessary it is, before resorting to the use of these means, to ascertain whether the distorted parts are capable of receding, in order to regulate the degree of mechanical power which is requisite, as well as to govern our prognostic.

Jones's stays, from being light, and of simple construction, seem well adapted for many cases of distorted spine, where the projection is altogether posteriorly, especially in young subjects ; but, when it is thought necessary to take off the superincumbent weight of the body from the lower extremities, Eagland's complete apparatus will be found to answer the purpose extremely well.

In addition to the use of these stays, which

ought always to be worn while the spine is erect, for a considerable time beyond the disappearance of every vestige of deformity, and during the latter period of their use, tonics may often be given with great advantage; and cold, but more especially sea-bathing, will be advisable.

CHAPTER XIII.

REMARKS ON SPINAL DISEASE, UNACCOMPANIED WITH
CHANGE OF STRUCTURE.*Symptoms of the Disease.*

WHEN there is no alteration in the natural structure of the spine, and little defect in the lower extremities, disease is not often suspected ; particularly in its incipient state. This fatal and hood-winked omission may partly be attributed to authors paying too little attention to this subject, and partly to the insidious nature of the malady itself ; but the following cases, being only a part which happened in the ordinary course of practice in so short a time, and the circumstances attending them, strongly prove that latent disease of the spine more frequently occurs than is imagined.

The lower part of the dorsal, and the whole of the lumbar vertebræ, as well as the sacrum, are particularly exposed to sprains and external injuries. After the effects of these have apparently vanished, and also after a long interval of undisturbed health, perhaps for several years, with the exception of some trifling or transitory pains in

the part, either on catching cold, or from other causes, the patient will be seized with a new order of symptoms, which are often considered as having no relation to the real cause; hence a secondary disease supervenes, which assumes such a character as no experience or physiological acumen is always competent to unfold.

At the commencement of this new affection, mostly superinduced from the prevalence of scrofula in the system, the patient complains of symptoms of dyspepsia, or want of appetite, together with bodily langour, and some degree of mental dejection. The countenance also puts on the sallow or ex-sanguine appearance, so common in spinal disease. These symptoms are accompanied with, or succeeded by, a slight degree of fever, which is often mistaken for debility, as the pulse is scarcely accelerated, and little increased heat is perceived. The patient's tongue, however, soon becomes furred and yellowish, especially towards its root, where, occasionally, it displays a dappled appearance, which is now and then observed in other varieties of spinal disease. He is also remarkably chilly, and equally susceptible of the cold.

But it sometimes happens that this complaint is ushered in by a smart attack of fever, supervening, after some lapse of time, to injuries done to the spine,—the pulse ranging from 80 to 100, with frequent rigors, and more heat and perspirations in the night. The tongue also is considerably coated,

and mostly of a deep yellow or dingy hue. In one case it was cracked, or appeared to be studded with minute and innumerable specks, about two or three lines in diameter.* The state of the urine is changeable; as some days it will deviate little from the healthy standard, and be in moderate quantity; but this appearance is of short duration, and observed to prevail the most in the middle of the day; as in the morning it is generally high-coloured, and deposits a mucous settlement, mostly of a lateritious tinge; but, in some cases, it uniformly preserves this appearance, with the addition, sometimes, of an orange or deep lemon-coloured cast, without deposit,—emitting, however, on standing, a supernatant pellicle, which mostly occurs when the disease is in the loins. Costiveness is often present; though the patient now and then may have slight attacks of diarrhœa.

The pain in the spine is often so trifling as scarcely to be felt, except when the patient has fatigued himself with loco-motive exercise, or been some time in an erect posture; especially if at the same time the superincumbent weight be increased, either by carrying burthens, or by manual exertion, though occasionally he may experience something of it in bed, either by lying on his back, or on suddenly turning himself. Sometimes, after the complaint is of long standing, serious mischief in the

spine is evinced by the state of the tongue, though the pulse may range below the standard of health, and be soft and exceedingly full. The proper remedies here are topical bleeding and caustics, and to the use of which a certain reaction of the pulse will generally ensue, which indicates a diminution of the latent disease.

Instead of the patient noticing these transient and inconsiderable pains, he will sometimes complain of soreness and pain in some part of the abdominal covering, but more especially opposite the seat of the disease. This local irritation, which is mostly very sore to the touch, is often construed into the cause of the febrile excitement kept up in the system; but which is sometimes abated by the application of leeches and blisters,—an advantage, however, often temporary, and which has little effect on the general symptoms.

Sometimes, when the seat of the disease is in or about the lowest dorsal vertebra, pain or soreness is felt in the right hypochondriac, epigastric, and umbilical regions. The abdomen is tumefied in consequence of wind and costiveness, attended with a slight degree of soreness and discoloration, which, together with a defect of nervous energy, constitute a train of symptoms that is mistaken for hypochondriasis. Under these circumstances, there will be sometimes a slight ptyalism, and which is no very uncommon symptom of spinal disease, particularly of the dorsal and lumbar vertebræ. There

will also be occasionally about the clavicle a dull pain, and the tunica albuginea will exhibit a slight icteric tinge. The urine will be somewhat high, and inclining to the orange-colour, but seldom containing any bile. The bowels here are also constipated, but the stools appear natural, though occasionally dark or ash-coloured.

From a collective review of these symptoms, the practitioner may be apt to suspect some disease of the hepatic organs, and advise the use of mercury; but, on trial, he will find no advantage from it, either in small doses as an alterant, or in saturating the system with it.

In a few cases, where the seat of the disease was in this situation, the patients complained of vertigo, with some pain in the head, and of weakness and torpor of the lower extremities, insomuch as to be incapable of walking steadily on a narrow causeway without stepping from it; in short, they almost constantly experienced such sensations as usually accompany a state of intoxication.*

When this disease occupies the uppermost lumbar vertebra, it is sometimes mistaken for calculus,

* When there is much vertigo, without pain in the head, I have seldom found local inflammation in the spinal column; but, though vertigo alone is seldom accompanied with this kind of diseased action, yet it is frequently sympathetic of gibbosity. On the other hand, cephalæa, in these cases, is mostly characteristic of local irritation in the spine; for which the remedy is obvious: whereas, in the former case, the same is inadmissible.

or nephritis; but these affections may easily be discriminated from each other by closely attending to those peculiar circumstances that indicate them respectively. In cases of calculus, the pain is felt some time previous to any accession of fever, and is mostly violent, and intermits. There is numbness of the thigh, and a retraction of the testicle, with nausea and vomiting. Red crystals are also often deposited from the urine, and blood is sometimes mixed with it; and the pain in the loins is increased upon any jolting motion of the body. In nephritis there is an acute pain in the region of the kidney, which shoots along the course of the ureter, with a frequent desire to make water, and some difficulty in voiding it. There is considerable fever, with a disposition also to vomiting, and the pain, which is at a short distance from the spine, is the easiest when the patient is laid on the affected side; whereas in scrofulous, or chronic inflammation of the spine, the symptoms are so marked, as always to elucidate its real character. These are a soft and somewhat contracted pulse, from 80 to 100, excepting in the latter stages of the complaint; varying much, in the course of the day, from slight accessions and remissions of fever. It is, however, sometimes found in the inflammatory stage to be slow, and even under the standard of health, in which case its diastole will be considerably augmented. There is much chilliness and susceptibility of the cold, and the tongue is much coated;

and (if the local irritation be either considerable, or of long standing,) inclining to a yellow hue, and with a degree of thirst nowise corresponding with this appearance. The urine is sometimes scanty, and high-coloured, and deposits a mucous settlement of a lateritious complexion; at other times paler, more copious, and without deposition.—There is always pain, either more or less, on one or both sides of the spinous processes on pressure,* which at any other time is little felt, excepting when the part is considerably acted on from mechanical causes; the patient complaining more of sympathetic pains, or a slight erythematous inflammation; attended with exquisite soreness in various parts, but more particularly in the abdominal parietes; and also frequently of pains in different parts of the head, especially on the right side.

This affection of the spine may be distinguished from lumbago, as the latter is marked by a different order of symptoms, such as a strong pulse not much accelerated. The tongue is seldom much furred, and there is no great defect of appetite. Rigors or chilliness is little perceived; and the pain

* A late author, in a very unbecoming manner, unworthy of a man of observation, satirizes his cotemporaries for (what he is pleased to call) *thumbing* the spine, in order to detect disease; but Avicenna, speaking of pains in the back,—meaning, no doubt, in the spine,—says, “Et quum manus invenit dolorem tunc causa est in dorso; et si non invenit tunc causa est in ventre.” *Avicenna, Lib. ter. Fen. 22. Tract. 2. cap. 2.*

in the loins is more diffused, and severest on bending, or more particularly on straightening the spine, especially on rising from a low seat. The patient is mostly of the middle age, or in the decline of life, of a hard fibre, and of an athletic or robust form of body, and generally much exposed to cold or hardship—though, sometimes, the indolent and luxurious are the subjects of it: whereas those most liable to the former affection are generally of a more delicate make, of a strumous diathesis, of younger years, and a great proportion of them are females. In one instance, however, the symptoms of this affection were so equivocal as to render it exceedingly doubtful whether the case was not lumbago.*

When this species of chronic or sub-acute inflammation is confined to the lowest dorsal, or the uppermost lumbar vertebra, and not attended to in its incipient stage, the consequence will sometimes be either lumbar or psoas abscess: to ascertain the existence of which we must refer to the diagnosis given us by authors who have written on the subject; but in psoas abscess, unconnected with disease in the spine, there is seldom any pain on pressure, nor does the tongue assume much of the orange or lemon-coloured tinge.

* Vide Case xxxvi.

CHAP. XIV.

Further and Anomalous Symptoms of the Affection.

FEW affections, to which the human body is subject, are oftener mistaken, or more obscured, than spinal disease, arising from chronic inflammation, unattended with any displacement of the bones. In the first place, because little pain is mostly perceived at the place of mischief. Secondly, the principal part of the irritation is often in the parietes of the abdomen, and generally in a transverse direction with the disease in the spine. Thirdly, there is another very frequent sympathetic pain, which is generally confined to one side of the head, and is sometimes very severe and distressing; in-
 somuch as nearly to engage the whole attention of the medical practitioner. Fourthly, since dyspepsia is a prevailing attendant, and to which many of the above symptoms are usually referred. Pyrosis is occasionally present, and vomiting, though less frequent, an hour or two after a meal. There is also pain, and an uneasy sensation or tightness, across the præcordia, with frequent eructations.

The sympathetic pain of the head, already alluded to, assumes a peculiar character, as it is generally confined to the right side, (and, I have thought, oftener when the disease is situated on the left side

of the spine,) and will continue throughout the day with slight remissions. It often begins just below the mastoid process, and passes in the direction of that part of the temporal bone behind the ear, and extends itself upwards, so as to occupy the right side of the occiput. Another pain, equally distressing, and perhaps more frequent, will pass from a point a little above the external angle of the right eye, along the superciliary ridge to the commencement of the left frontal sinus; though sometimes it extends further. This pain is usually less in the night, and the patient's rest is seldom much disturbed by it. In the morning, however, on rising from bed, it returns with increased violence, for an hour or two, or even longer; after which it somewhat abates, and continues through the day, with sometimes a few intervals of ease. This pain, after a while, seldom fails to affect the power of vision, though in no material degree. In two cases which I have seen, the patients complained of black spots or specks floating occasionally before the eyes; but, in other respects, there was no defect of vision, nor alteration in the natural appearance of the eyes. In another case, the pain in the forehead was increased on closing the eyelids.* Occasionally patients complain of confused vision

* One patient, after having intently watched the progress of the late solar eclipse for some time, was seized with head-ach, which was so severe as to affect his sight, and to confine him to bed, in a dark room, for two days, before the pain materially abated, and his eyes could bear the day-light; but, whilst in this state, I had not an opportunity of examining the eyes.

on looking at objects steadily for a short time ; and particularly, on reading by candle-light, they cannot distinguish the words or letters from each other. The mobility of the iris, under these circumstances, is generally somewhat diminished. Although these symptoms are mostly confined to the parts of the head already described ; yet, now and then, we find them occupying either the whole occiput or os frontis ; and, in a few instances, situated along the course of the coronal suture.*

Other sympathies of the head, and of the same kind, might be adduced, but the above will be found sufficient for every practical purpose ; and, if properly attended to, will lead to the discovery of their real nature.

Notwithstanding I have briefly mentioned the prevalence of these secondary affections in various parts of the abdominal covering, and generally in a transverse direction from the diseased part of the spine ; yet I have to point out one situation that is, perhaps, most liable to them, if we except the epigastric region,—namely, the part about, or at a short distance from, the anterior spinous process of the ilium, and mostly on the left side, and accompanying disease in the lower part of the spine. The epigastrium, however, is the most frequent seat of

* In more than one instance, as above remarked, it has appeared that affections of the eyes have resulted from the existence of disease in the spine. In one case, in particular, dysopia, attended with some degree of apparent opacity of the crystalline lens, subsisted as a secondary affection.—See Cases xiv. xvii. xxviii.

this sympathetic irritation, when the primary disease is in the opposite part of the spine. A very similar affection is sometimes observed in this part, which extends into the hypochondrium, and seems to be occasioned by the protrusion of the cartilages of the false ribs of the same side, which has already been observed.

The whole of these sympathies are not only painful, but so embarrassing as entirely to engross the attention of both medical attendant and patient; seeing that the pain in the spine is only trifling, and perhaps felt but occasionally. Hence the sufferer, as we have too often seen, has been harassed by a long-continued course of severe treatment, that has been productive of no permanent advantage; whereas, had the same means been directed to the seat of the primary disease, a cure most probably would have been the result. To obviate such consequences the young practitioner will do well in riveting in his memory those secondary symptoms, as affording a clue for detecting the parent disease.*

Physicians are no strangers to sympathetic affections of a similar kind: for analogous to those I have been describing, sometimes is observed one depending on a stone in the ureter; where the principal part of the pain is confined to a point of the abdomen about midway between the ilium and navel. Dr. Pemberton says, "Although this pain is sympathetic, yet it is much increased by the

* Cases xxv. xxvi. xxviii. xl.

slightest pressure, and has been so acute, in some cases, as to arrest the whole attention of the patient, and it has required considerable address to convince him that it was not inflammation of the intestines under which he laboured. The practitioner might also be misled as well as the patient, if he did not weigh in his own mind (as he should in every case) the aggregate force of all the symptoms collectively, before he pronounced his opinion of the nature of the disease."

Notwithstanding the abdominal parietes are generally the seat of these secondary affections, which are attended with pain and soreness; yet occasionally; though very rarely, these are observed in the lower extremities. In one case* the pain was decidedly spasmodic and periodical; while another† displayed all the characteristics of inflammation.

Not only are the dorsal and lumbar vertebræ subject to this species of inflammation, but we sometimes meet with it in the sacrum; in which case it requires no ordinary powers of discrimination to detect it; particularly in its nascent state, as the pain in the part is both trifling and obtuse, and not dissimilar to that usually ascribed to weakness. Most of the symptoms common to this affection, in other parts of the spine, are here present; with some addition, however, which renders it necessary to give the whole in detail, as it relates to a subject of vital importance.

* Case xxvii. † See Remarks at the conclusion of Case xxvii.

Besides this pain in the sacrum, the pulse is somewhat small and contracted, without much acceleration. There is also anorexia, languor, and constipation of the bowels. The tongue is more or less coated, and assumes the yellow hue as the disease advances,* with little thirst; and a constant sense of chilliness, or rigors, in the day-time always prevail; and the urine assumes an appearance similar to that already so often described, with the addition of being voided with more heat, oftener, and in smaller quantities. The pain in the sacrum is always worse on long standing, on lifting weights, or on loco-motive exercise; and is increased by pressure from a hard body, or by making a false step in walking; or suddenly bending or straightening the spine. There is also a slight degree of pain and weakness in the lower extremities; and, when the disease is situated in the lower part of the sacrum, there is sometimes tenesmus, or an uneasy sensation about the anus, accompanied with colicky pains, which are relieved by frothy stools.

These symptoms may continue some time with little apparent alteration; but, after a while, the

* This appearance of the tongue, I have thought, is not quite so prevalent here as when the disease occupies the lumbar or dorsal vertebræ. (See Case xlii.) It is, however, in spinal cases always in proportion, *cæteris paribus*, to the age of the patient, and generally either vanishes or lessens from spontaneous, or rather colliquative, diarrhœa, leaving the tongue denuded of its papillæ.

pulse will acquire more frequency, and some degree of hardness, and be less contracted. More heat is generated, with increased thirst; and occasional perspirations, particularly in the night, will ensue, which are sometimes very profuse. At other times, diarrhoea, which is generally periodical, and often lessens the fur on the tongue both here and in other spinal cases, will supervene; the urine is higher coloured, and less variable, with more deposit, or inclinable to be turbid. The pain in the sacrum about this time is somewhat increased, both in degree and constancy; and, by extending more perceptibly to the pelvic viscera, causes some derangement in their functions. The uterus, for instance, will be occasionally and secondarily affected, as is shewn by the frequent returns of the catamenia, changed often in colour, effected with pain and difficulty, and succeeded, in the intervals, by leucorrhœa, or a serous or brownish discharge, occasionally of a yellow tinge. The dysury, or heat and difficulty in micturition, are more perceptible; and sometimes a greasy and supernatant pellicle, with a purplish shade, will be found to alternate with the mucous deposit,—a circumstance, I think, more observable in this quarter than in any other part of the spine.*

This aggravation of symptoms is often the precursor of suppuration, forming either externally or

* In one case, which exhibited some peculiarities of constitution, and where the disease had been confined for a considerable

internally, attended with caries of the bones. When matter forms outwardly, it is generally in young subjects, who frequently recover if the habit be tolerably good; but, when this process goes on internally, it is mostly after the age of puberty, and succeeded often by fistula in ano, and a train of hectic symptoms, which seldom fail to hurry the wretched sufferer off the stage of life.

Although this complaint in the beginning mostly puts on a slow form, yet sometimes, though seldom, it displays a more active character. In a few cases I have found it attack those in years; one of which was an asthmatic, who, after being afflicted for thirty years, found himself unexpectedly relieved for several months, before he was seized with inflammation in this part, which terminated fatally in a few weeks.

Sometimes this species of chronic inflammation is mistaken for a similar affection of the uterus. In the latter, however, the pulse is generally more frequent, and often at the beginning more thready

time to the upper part of the sacrum, attended with the sigmoid flexure of the spine, but without any evident signs of suppuration having formed, the appearance of the urine was changeable. When it contained more of the urea, it deposited the mucous sediment; but, when it approached more to a yellow or saffron tinge, it had the appearance of being mixed with oil; being very frothy when voided, and, on standing a while, a greasy scum of a purplish shade was observed on the top of it. In another case, the mucous deposit was more of a milk-like curdled appearance, and alternated with this greasy and purplish pellicle.

and concentrated : there is also more thirst, and less habitual chilliness ; and the pain in the sacrum is less on pressure, and more acute in the pelvis.

On a careful review of this subject, its importance and intricacy will appear equally manifest. Intricate by bearing a close analogy to other affections, for which it is too often mistaken ; and important, from the necessity there is for attempting some elucidation of its real character, before irremediable, and which is an object of no small consideration. Hence the indispensableness of acquiring a clear and thorough knowledge of its diagnosis. In this country, where scrofula is so insidiously prevalent, we often detect diseases of the spine, such as form the subject of this chapter, by attending to their sympathies, which have been treated as idiopathic affections, to the distress and negative advantage of the sufferer. Dyspepsia, which is symptomatic, and often accompanied with those sympathies of the head already described, and which is often thought to be the occasion of them, is considered as idiopathic ; and, when the tonic plan of treatment is adopted in consequence, it is mostly productive of injury, by increasing systematic as well as stomachic derangement. When, however, this effect is produced by tonics, there will always be ground, under these circumstances, for suspecting some spinal affection.*

* Dyspepsia, as a primary disease, which often occurs in large cities among the idle and dissipated that indulge in tea and spi-

CHAP. XV.

*Symptoms of the Disease in Children; Mode of detecting it;
&c. &c.*

ALTHOUGH this variety of spinal disease, (the subject of the last chapter,) is more particularly observed in adults, yet we sometimes meet with it in young children, as the precursor of distortion, and to detect which often requires some little address, and attention to circumstances, which are usually collected from the nurse or mother of the child;—who will inform the medical attendant that the latter is not well, or, at least, that something is the matter with it, as it is less lively, weaker, and more disposed to be still than to use its legs;—she may also tell him that the child shews some uneasiness when in certain positions, particularly when laid on the lap. To detect the seat of this disease, it will often require some little address, as the child will generally cry violently, all the time he is under examination, without being able to express his feelings particularly. The first step had recourse to, will be to relieve the child from all rituous liquors, is not so frequently met with here among the lower orders, who work hard, and live on milk, oatmeal, potatoes, malt-liquor, and a small proportion of animal food. The complaint, however, is often attended with pyrosis.

fear of being hurt ; and, after he is reconciled to the practitioner, the latter may gently run his fingers along both sides of the spinous processes ;—but he must do this several times in such a manner as to give the child the idea of being played with. After having thus obtained the confidence of his patient, he may then venture to increase the pressure, that will soon point out the diseased part, which is evinced either by his cringing or crying. The examination is again to be repeated along the whole spine, with the addition of some little pressure uniformly applied ; and, if the child complain the most at the same point, which is often between the middle dorsal and middle lumbar vertebræ, the practitioner may then conclude that he has discovered the seat of the disease. Another method, though less practicable, may, however, sometimes be employed ;—namely, when the little patient is asleep, the physician may run his fingers gently down the spine, if the position of the former be favourable to such an examination ; when the latter, from his patient's feelings, if there be latent disease, will be enabled to discover it. The circumstance of some fever, accompanied with a whitish and somewhat furred tongue, whose base is yellowish, ought to be attended to.*

As the above observations only apply to latent and sub-acute disease of the spine, without any

* See Case xxx.

material defect in the lower extremities, it may not be amiss, though irrelevant to the subject, to glance at a certain species of paraplegia, or paralysis of one or both of the lower extremities, which is mostly peculiar to children about two or three years of age, and neither attended with distortion, nor proceeding from any known cause,—as the little sufferer is generally in apparent good health previous to the attack ; but which is succeeded by symptoms of re-action, such as thirst and a furred tongue, with increased heat and perspiration in the night. I have also observed, that, in proportion as the lower extremities are paralysed, the patient will exhibit signs of animation and bright intellects ; and hence he always excites peculiar interest and commiseration on beholding him dragging behind him his dangling limbs, and, perhaps, heading a little troop of playful companions, and directing all their childish evolutions.

In proportion as the limbs become shrivelled and flabby, all the rest of the body will be directly increased in muscular and nervous energy.*—The proximate cause of this affection, like some others

* I once knew a common beggar, who crawled about the country on his belly, with the aid of his arms only, as he had no use in his lower extremities, that possessed most uncommon strength in his arms and chest. This man was a notorious boxer, and would contend with any man, provided he would allow him to be placed on a table with his back against a wall, or any other support ; but he became so well known that few durst encounter him.

which are ascribed to some derangement in the nervous system, is involved in obscurity, and is, perhaps, likely to remain so till we are better acquainted with those laws that govern this part of the animal frame. Some authors attribute the cause to inflammation, or some other disease, within the skull, meaning congestion or organic lesions. Do any of the phenomena accompanying this disease indicate such causes, or betray any defect in the organs of sense, such as strabismus, or any other muscular contraction, about the head; or even mental aberration, or imbecility? From these considerations, are we warranted in attributing the cause to such sources?

In one case, where some pain was perceived on pressure, about the first lumbar vertebra, caustics were applied for four months, with little or no advantage. In another case, where there was also some pain in the lower part of this region, friction was had recourse to, along with a gently stimulating liniment to the whole spine, and lower extremities, for several months; with some temporary success; but, whether this could be ascribed more to these, or internal means, such as hereafter are recommended in these cases, or to other causes, is, perhaps, difficult to say; but, notwithstanding, in a while, the lower extremities became extenuated, colder, and more flabby, and the capsular ligaments of the knee and ankle-joints elongated, and, afterwards, followed by a further shrinking and con-

traction of the limbs, with the feet inflected inwards.

In a third case, a few leeches, at the first, and afterwards small slips of blistering plaster, were applied, along each side of the spinous processes, at different points of the spine, and frequently repeated, for many weeks, also, with advantage; but, whether this effect was permanent, I am uncertain.

Of electricity I cannot speak much in favour, but it may be used with caution; and sea-bathing, with gentle and long-continued friction to the spine and lower extremities, may be employed; but the use of powerful stimulants long-continued, either internally and externally, is seldom advisable: it too frequently happens, however, that no remedy, hitherto discovered, is of much avail.

The vascular excitement, which succeeds to paraplegia, may, in general, be considered as favourable, as there is seldom any deterioration in the state of the lower extremities, during its continuance; but, as soon as this materially abates, the limbs often sustain a farther loss of muscular and nervous power. Hence the necessity of guarding against all those means which are likely to depress the *vis vitæ*, such as cooling sedatives, or debilitating evacuants. Calomel may be given as an alterant, or sometimes in such doses as to act upon the bowels, in case of costiveness, along with the citrate of ammonia, joined, occasionally, with some

gentle stimulants, which may be increased as the feverish symptoms abate. Friction, also, at every period of the complaint as already recommended, may be used with propriety.

A complete paralysis of one of the lower extremities may probably proceed from a cause similar to that which produces paraplegia ; though I have, in two instances, seen it succeed to fever and diarrhoea, in children under two years of age, after being much reduced, from these causes, as well as, in one of the cases, from a protracted lactation.—The limb became flabby, cold, and extenuated, and ultimately shrivelled, and resisted all the means had recourse to for its recovery ; but, in slighter cases, the above plan, particularly friction and sea-bathing, will often be found successful.

CHAP. XVI.

Cure of Disease of the Spine without Distortion.

THERE are few instances in this species of diseased spine where any considerable advantages are derived from the use of internal remedies ; yet, notwithstanding, they may often be employed as auxiliaries. At the onset of the disease, before it has made any serious progress, repeated abstractions of blood from each side of the spine, by cupping, in adults, or the application of leeches, in young children, will often supersede the necessity of any farther local means ; but, after the complaint has made farther progress, which will generally be known from the state of the tongue, and other symptoms, already enumerated, these remedies, notwithstanding they may often apparently subdue the disease, cannot alone be depended upon, without the aid of a permanent drain, for securing the patient from a return of the complaint. Caustic-issues, or a copious drain, are, therefore, our principal dependence, and, if timely had recourse to, will be productive of the happiest effects ; but to ensure which it will be necessary, not only to make the caustics penetrate deeply, so as entirely to destroy the cutis, but so extensive as to compre-

hend, if not the whole, a very considerable portion of the integuments covering the subjacent disease; the propriety of which will be seen on the well-known principle, namely, the effects of a drain on local disease being always inversely as to its distance. Besides, we know that in cases of chronic or serofulous inflammation of some of the soft parts, if a blister be applied, which envelops not the whole affected part, there will still remain the same or increased irritation in the unblistered part, which the discharge has little effect in removing; whereas, if another blister be made to comprehend the remaining part of the inflammation, the whole irritation will be thereby subdued. Whence the propriety of a perpetual blister when the disease is superficially extensive.

This analogy does not warrant us in subjecting the patient to such a loss of substance from large caustics, unless we can bring forward observation to our aid; but whoever has repeatedly seen the difference in the effects of large and small caustics, in such cases, will be convinced of the preference due to the former. We sometimes see, either from accident or carelessness, that caustics produce eschars double the size intended; which we regret not, after perceiving the good effects that accrue from them.

Not only ought caustics to be of large extent, but so powerful as completely to destroy the cutis; for if this be only partially effected, the process of

desquamation will not only be tedious, but the discharge more ill-conditioned, and less approaching to the *pus album læve et æquale*; the disposition also to heal will be greater, and, besides, the granulations will be less luxuriant, and a corresponding difficulty in pressing down the peas, which are apt to afford increased irritation, as well as more liable to be displaced, will be incurred.*

The practice of dissecting out, or prematurely removing the slough, is highly exceptionable; as it deteriorates the discharge, and the sore is rendered foul and unhealthy from part of the eschar remaining, and which will be slower in digesting off than if the slough had never been interfered with.—It is really curious to mark the process which nature adopts in throwing off the eschar.—For two or three days after the removal of the caustic, we observe the skin, in contact with the margin of the eschar, to increase in inflammation till about the end of this period, when suppuration, and consequent separation, begin to take place as the inflammation subsides, and granulations shoot forth; and, in proportion as these are of luxuriant growth, they will cause both the sound and dead

* In cases of issues, or caustic-issues, to repress fungus by escharotics, I always conceive to be an exceptionable practice, when their object is to procure a copious discharge; for, in proportion as these are applied, the disposition to heal up will be accordingly increased, and consequently the discharge lessened.

skin to retract. The slough, by lying on the young granulations, (and if prematurely removed cannot be compensated,) stimulates these to throw off any remaining diseased cellular membrane, and to further the work of suppuration. Whence the impropriety of removing that stimulus so necessary for expediting the process of separation becomes obvious; for, in proportion as the slough is prematurely removed, the sore will often be more painful, and display a less healthy aspect, which is always unfavourable, and generally indicative of less advantage from caustics. Hence, also, it is an object of no small importance to obtain an ulcer studded with luxuriant granulations, not only for the purpose of procuring a free, regular, and healthy discharge, but for embedding the peas, which, if once accomplished, the trouble arising from the disposition to heal up, will be obviated,—a circumstance often apparent, particularly when we have reasons for suspecting the subjacent disease to be far advanced.

As soon as a copious and healthy discharge is obtained, all symptoms of local and general irritation abate; and, in proportion as this is kept up, the patient will, in general, progressively recover; but, if this discharge, from any cause, be suddenly diminished before the disease be subdued, and which is sometimes the case, the effects are soon perceived by a failure of appetite, and a partial recurrence of the general symptoms.

If this theory be founded on the broad basis of observation, we may infer, that whatever tends to abate this irritation, so necessary in the work of desquamation, ought to be withheld. Even emollient cataplasms, which are often had recourse to, although they may expedite separation for a while, yet, on the above principle, cannot be advisable ; for it frequently happens, that the middle portion of the slough is suspended by a pedicle of diseased cellular membrane, which will require some time in digesting off, in consequence of the efforts of nature being enfeebled by impaired action ; and, even after the slough is cast off, some of this diseased cellular substance will remain on the middle of the sore, and, as often as removed by art, will partially return, at least for a time. The rest of the sore will also exhibit a somewhat less healthy appearance than if nature had been left more to her own operations.

This cellular membrane-like reproduction just alluded to, and which results from a diminution of local excitement, may be more clearly seen in other instances, where such a degree of heat has been applied to the surface of the body as is sufficient to destroy the cutis, as in deep and extensive burns or scalds. Under these circumstances, if, for the first two or three days, such means are practised as will abate general and local irritation, and, at the same time, depress the *vis vitæ*, the consequence will be a protracted separation of the eschar,

and which, after achieved, will leave a pallid and crude sore, throwing out, as often as removed, a fresh quantity of half-digested *cellular membrane*. The cause of this reproduction may be lessened by the frequent application of stimuli, or escharotics, to the sore, now inclinable to be sordid and fungous, and disposed to heal slowly, and often, when reduced to a small size, will remain stationary for some time ; but, after a respite, nature, in conjunction with some change or amendment in the habit, will effect a cure.

The symptomatic fever consequent to burns or scalds, and which is present during the inflammatory stage, will subside from suppuration ; but any attempt at prematurely reducing this by art, and especially by evacuations, combined with those topical means adapted for allaying irritation, will induce not only a train of symptoms, such as are already enumerated, but will procrastinate a degree of febrile excitement to an indefinite period,—which has no inconsiderable influence on the healing of the sore. These effects are the more displayed when the patient is advanced in years, or of a bad habit of body.

This digression is intended to illustrate the propriety of suffering the caustic-eschar to slough off without the intervention of art ; but, as it may always be advisable to adopt some application, the common resin ointment, either alone or mixed with an equal portion of the spermaceti ointment, spread thinly

on lint daily, and covered with the adhesive plaster, is what I have generally used.

Some practitioners prefer setons to caustic-issues; but, when the intention is purely to obtain a discharge, without reference to any other object, the latter are preferable, as the former, if large, will cause a considerable degree of irritation,* and, if small, the end will only be partially answered. Another object is obtained by the use of caustics, as we are enabled to procure a larger drain from the immediate neighbourhood of the disease: the seton occupying only a long and narrow space, whereas caustic-issues may be made of any shape or dimensions. I have seldom made caustic-issues in adults, in any species of spinal affections, less than two inches and a quarter in length, and one inch and one third in breadth, and sometimes of greater dimensions; and, when the disease is confined to one or even two vertebræ, these prove excellent drains. Another advantage which large caustic-issues possess over small ones, though of minor import, is, that before the fungus becomes sufficiently exuberant for holding the peas, the sore

* In one case, where the disease had been confined to the second lumbar vertebra for many months, (but in which there was no stridor,) the irritation which, in five or six weeks, followed the insertion of a couple of setons in the part, but more especially a little above the spine of each ilium, was so distressing, and painful to the slightest touch, as to render it necessary to withdraw the setons;—in a day or two, after which, however, with the aid of a few leeches, these symptoms vanished.

of the latter is materially contracted, and any attempt to insert these, immediately after the slough falls off, not only produces considerable and distressing irritation, but much trouble is afforded in keeping them in their proper places; it will, therefore, always be advisable to wait some time before any substance is inserted for keeping open the sores. Another circumstance worthy of attention, in order to obviate irritation, is, that, whatever body is inserted for keeping open the sores, it ought not to come in contact with the edges of the cutis.

In addition to the use of these drains, the medicines already recommended in cases of local and general excitement will be proper adjuncts. These, after being taken for some time till the inflammatory symptoms are abated, may be combined with some mild tonic; but the criterion for determining on the use of which is always the effect it has on the appetite. Bark, however, or any other stimulating tonic, ought to be ventured on with caution, for, as long as the tongue exhibits fur, we ought to be sceptical as to their propriety,—as I have sometimes had occasion to remark on prematurely giving the bark. In such cases, the tongue will acquire additional fur, the heats increase, and not only will the appetite decrease, but the digestive organs will be disturbed. As long as these effects are produced by tonics, in the inflammatory stage, the necessity of keeping up a copious drain becomes absolute. When, however, the appetite ceases to improve, under the use of

these drains, and the tongue is but little furred, the pulse remains soft and languid, and the urine is little changed from the healthy state, tonics may generally be ventured upon, though at first with caution; but it has been already remarked, that the plan which produces an increase of appetite ought to be pursued, as this result is the grand criterion for regulating our practice. Under these circumstances, also, of reduced inflammation, and when the secretions are plentiful, sea-bathing is often attended with the best effects, commencing sometimes with a temperature of from 80 to 90 degrees of heat, and gradually reducing it.

Although copious drains are strongly recommended, yet they are not always successful. When the pulse is under a hundred, the greatest advantage may be expected from them. When it ranges from this number to one hundred and ten, their effects are slow, and more uncertain; but, if still farther increased, and the tongue display a thick and brownish fur,—and especially if there be any visceral disease, attended with colliquative discharges, (for these observations hold good whether distortion is present or otherwise,)—copious drains are seldom advisable, as they are productive of no permanent advantage; and sometimes are injurious, and consequently may expose the young practitioner to much censure.*

As another means of cure, it will always be

* Case xxxviii.

prudent to remove the superincumbent pressure, on the principle of abating irritation, by adopting either altogether the horizontal posture, or some well-adapted mechanism. In the first stages of the complaint, however, few patients can be prevailed on to submit to these restrictive means ; but, when the disease is farther advanced, this remedy is indispensable,—for, if caries and consequent distortion ensue after the age of puberty, the patient generally dies tabid.

APPENDIX

OF CASES ILLUSTRATIVE OF

STRIDOR ABDOMINALIS,

AND

Spinal Disease.

SECTION I.

CASES OF STRIDOR ABDOMINALIS.

CASE I.

Miss B. a young lady of great personal accomplishments, and of an upright form, but with a rather slender spine, full chest, and bony upper extremities, applied to me in the summer of 1811, for a stridulous, or croaking, noise of the bowels; which, though unattended with pain, was a source of mental distress to her, as it disqualified her from enjoying company.

She complained, also, of anorexia, and great lassitude, and weakness, particularly on bodily or loco-motive exercise. Her complexion, naturally fine, had now lost the bloom of health, and become pale and shrunk, and her whole body grown thinner. She was chilly in the day-time, with alternate returns of exacerbation and remissions of fever,

though in a slight degree, and without observing any regular periods ; the former of which, however, was often most apparent about two p. m. and in the evening.

Her pulse was soft, and ranged from 75 to 80 in the fore part of the day ; but in the evening was often at 90. Her tongue, towards the root, was whitish and rather furred, and she had some thirst. Appetite defective ;—urine somewhat high, and mostly without sediment. Her bowels were constipated, but her stools manifested no unnatural appearance. She often complained of great pain in the fore and upper part of her head, as well as in the loins ;—this last being mostly aggravated in the evening, or on taking walking-exercise. Had, also, often pain and tightness at the præcordia, succeeded by faintness and a sense of sinking.

The croaking sound within the abdomen came on at intervals, and was loud, and generally continued from ten minutes to half an hour ; being mostly excited on taking nourishment. For instance, two or three minutes after commencing a meal, it would begin, and generally continue longer before it ceased, than if brought on from a different cause. It appeared, however, to be often the worst in the evening. The beating was in the left side, about two inches transversely from the navel, and the stroke was considerable. The abdomen in the evening was enlarged, but not uniformly so ; for the swelling was confined principally to the left

side of the hypogastrium, and appeared nearly circumscribed, and of a cylindrical shape, that passed along the inside of the ilium. In the morning, however, neither this nor any other part of the abdomen seemed much altered. She could lie on both sides, though the left was preferred. She was also regular as to her menstrual periods; but the discharge was more serous than usual, and in the intervals was troubled with leucorrhœa.

These symptoms had not only prevailed for the preceding twelve months, but, during the latter part of that period, had gradually become worse; and for which she had, occasionally, taken tonic or antispasmodic medicines, on a supposition that her complaints were nervous, and occasioned by mental perturbation.

In consequence of having found, as was supposed, some advantage from the use of tonics, something of this kind was ventured on, in small doses; but which was soon found to aggravate most of the symptoms. A smart purgative was next prescribed, but this produced such a degree of weakness, without any compensation, that it was thought advisable to discontinue this plan also. On thus rather losing ground in so short a time, I began, after further weighing the circumstances of the case, to suspect some local affection, connected with the febrile excitement; but, as she complained of no pain that could warrant such a conclusion, save that in her loins, which seemed to be satis-

factorily accounted for from leucorrhœa, this supposition was rendered doubtful. The circumstance, however, of frequent pains and great weakness in the lower extremities, along with other symptoms that usually indicate the presence of spinal disease, induced me to request an examination.

The second, third, and fourth lumbar vertebræ, but more particularly the two latter, were distorted to the left side; and, I thought, in a slight degree anteriorly;—she also complained much on pressing on each side of these vertebræ. This flexion of the spine not only gave an increased hollowness to the right iliac region, but rendered the corresponding hip *apparently* larger.

Caustics were now applied, and the citrate of potass, and the cathartic mixture prescribed. The horizontal posture, also, was strictly enjoined; and in a short time she began to exhibit signs of amendment; but, as the term of her visit to this place was now expired, she returned to her parents, who resided at a distance, and I became deprived of the opportunity of attending to the farther progress of her recovery; but her family surgeon favoured me, some months afterwards, with the following answers to certain queries I propounded to him:—

“ —I will endeavour to answer your queries.— Looking at the time Miss B. has been the subject of so deplorable a complaint, you will, I make no

doubt, agree with me in opinion, that she is better than many under similar circumstances.

“ 1st. The changes that have appeared since you saw her, are, an increased dyspeptic action, or a regular throwing up of her food soon after eating ;—syncope when in an erect posture, and oftentimes when sitting ;—a slight numbness in the left leg ;—and considerable weakness in the spine about the first lumbar vertebra.

“ 2d. The croaking noise has greatly subsided, and rarely returns, but on some sudden surprise, or agitation of mind.

“ 3d. Her appetite is far from being good.

“ 4th. Her general strength as well as substance is not diminished of late, or for the last four months.

“ 5th. She cannot walk without a great suspicion of inability. She has been so intent upon preventing distortion by a recumbent position, that this inability in a great measure arises from a want of due tone of the muscles ; so that she has great difficulty in balancing herself.

“ 6th. The distortion is not increased. I really do not perceive any visible alteration in her form. I believe she has grown taller.

“ 7th. She continues to have pain in the lower part of the abdomen and *regio lumbaris*.

“ 8th. Her fever rarely occurs, and its periods are very irregular : however, she has had a little more within these few days past. I have long thought

that sea-bathing would be highly advantageous ; but the distance to the coast, and her present disposition to syncope, on every extra-motion, entirely preclude the attempt. The croaking noise will subside when respiration is suspended ; therefore, it must be governed by the action of the lungs and diaphragm.

“ 9th. Miss B. still continues to have the *fluor albus* to a considerable degree, and I am very certain it greatly tends to increase her sufferings, such as pain in the loins, sickness, and debility. Whenever the discharge is less, she feels herself better.

“ 10th. In proportion as the inferior ribs of the left side have protuberated, she has been incapacitated from lying on the same side.

“ 11th. Her catamenia are rather irregular, and accompanied with more pain.”

After an interval of some months, this gentleman favoured me with another letter, briefly stating, that his patient was recovering gradually ; but that another surgeon had been called in, who had recommended a seton in preference to caustics. From this time my correspondence with this gentleman ceased.

In the latter end of last summer, (1817,) I wrote to this young lady, requesting a circumstantial detail of all the changes that had occurred relative to her case subsequently to her departure from this place, and was favoured with the following reply :—

“ SIR,

“ With pleasure I can reply (in answer to your kind inquiry after my health,) that it is perfectly re-established. I am now as well, and as free from distortion, as I was before the commencement of my illness ; a little weakness being all the inconvenience I now experience. The curve in my back is so slight as not in the least degree to affect my figure. This you may perhaps think extraordinary, but it is no less true.

“ In about a fortnight after I left Huddersfield, I commenced lying on my back, and seldom turned ; but, when I did, it was upon my right side ; for, now, upon my left I could not bear to rest longer than for a few minutes, from a pain that lay under the ribs. I invariably vomited the greatest part of my food, immediately after taking it, and, of course, only a small portion of it was retained ; but this rejection of food was not accompanied with any violent exertion, as it rose into the mouth without any effort on my part.

“ The pain in the back was dull and heavy, and attended by frequent head-aches, which, generally, lay across the forehead, or upon the top of the head, and a degree of faintness, which did not amount to vomiting. I had also a tightness across the stomach, as if bound by cords ; but at what period the most oppressive, I cannot now say ; and

also had great pain between my shoulders, and, very often, in my left side.

“ In the first two years of my illness, I was much troubled with the noise in my bowels, which always came on directly after taking food ; but whether it affected me in bed, I cannot speak decidedly ; but am certain I had it for a considerable time after my confinement to bed, equally as violent, though, perhaps, not for so long a time together as before I began to lie down.

“ I do think, that when in Yorkshire, and for some time after my return home, I could lie upon both sides ; though, as the disease increased, it became more painful to lie upon the left than the right side ; and I am certain, that for two years, or more, I could not bear to turn upon the left side for a pain, as I before said, that lay under the ribs. I generally lay upon my back, as that was the most comfortable position ; and I know it was some time after I began to walk about, before I could rest on the left side with ease.

“ The protrusion of the ribs is to the left side, but that was never great, and is scarcely now discernible. You may, perhaps, recollect what distortion the spine had assumed before I left Huddersfield : I think the curve increased a little afterwards ; but have heard Mr. H. repeatedly assert, that, from the time I began to recover, the back gradually became straighter. The noise in my stomach has entirely ceased ; but I think my bowels

are not quite so strong as they once were, and I am rather subject to wind in my stomach, which sometimes occasions sickness ; but, excepting this, and a little debility, am quite as well as I ever was.

“ I cannot positively attribute my late illness to any particular cause ; but I have sometimes thought it might arise from a sprain I got about twelve months before I went to Huddersfield, as I often found my back weak afterwards.

“ You know, Sir, Mr. P. attended me in the former, and Mr. H. in the latter stage of my complaint. Soon after Mr. H.’s attendance, he advised a crib to be made, to run upon wheels, in which I lay upon a board, without mattrass. I believe this was a great means of preserving me from farther distortion. At one time I had a chair constructed ; which supported the weight of the head and shoulders from the spine : this, however, did not answer very well, as it distended the back too much. When I was able to bear it, I was removed into the country for change of air, and was wheeled out in my crib into a garden, for as long as was agreeable. In about three months after my removal, I first began to stand, and then to walk a little. You know not, Sir, what pleasure this gave me, after having laid for three years together. Some time after, I adopted sea-bathing, which quite restored my health. Altogether I had about thirteen setons in my back ; and, in the beginning, a discharge was very difficult to obtain, but which

became more copious in the latter part of the disease.—The issues have long since been healed up without any inconvenience. I forgot to relate, in its proper place, that I was sometimes troubled with a kind of spasmodic affection in the stomach. As I have now endeavoured to answer all your questions, I shall subscribe myself

“ Yours,” &c. &c.

CASE II.

Miss S. aged 12 years, and a stout bony girl, with a broad chest, long spine, and bony arms, applied, in the summer of 1812, for the cure of stridor abdominalis, which had afflicted her for six months. Previously to this attack, she had been at a boarding-school, where she had suffered from the want of proper nourishment, and been subjected to the discipline of braces, and a sitting posture many hours in the day, which punished her severely.

The noise within the abdomen had now become frequent and loud, and continued from four to eight or ten minutes ; and generally returned when the stomach was empty, with faintness, and a sense of craving for food. Her appetite was defective ;—pulse from 80 to 90, but soft ;—tongue whitish, and slightly furred : but was seldom thirsty. Had constant and habitual chilliness, with little heat ;—

bowels somewhat costive, without tenesmus ;—urine little altered ;—and she could only lie on the left side. She also complained of pain in the loins, lower extremities, and head ; which, in the two former, was aggravated by exercise or labour.

On pressing on the loins, a considerable pain was felt on each side of the third and fourth vertebræ, and the spine, at this point, inclined some little to the left side.

For this noise she had been ordered tight stays, by a respectable practitioner, which had the effect of partly stilling it ; but produced a considerable degree of sickness, which she attributed to the diminished action of the bowels.

Caustic-issues, an emetic, the citrate of potass, and the aperient mixture, were prescribed. For the first fortnight, the ventral noise left her, but, subsequently, for three weeks returned : after this time, however, nothing more of it was heard. The issues were kept open for ten weeks, during which time she daily recovered, insomuch, as to be considered convalescent at the end of this period. At the expiration of four years, she had a return of the noise, in a similar degree. I saw her three months after its re-commencement, and found her without fever,—as her pulse was soft, and at 64, though somewhat full ; and her tongue clean, without thirst, rigors, or any unnatural heat : neither was there any pain or distortion in the loins, nor constipation, nor tenesmus :—her appetite, how-

ever, was bad ;—her complexion sallow and exsanguine ;—the catamenia pale, and less in quantity ;—and she complained of weakness, and being thinner.

An emetic was ordered, and, afterwards, three or four grains of the sulphate of iron in solution, to be taken three times a-day. On beginning with this medicine, the noise left her ; and, after taking it three weeks, she regained her usual health and appearance.

CASE III.

LUCY ARMITAGE, æt. 27, an unmarried woman, of the middle size, but well formed, was attacked with a noise in the bowels, in the spring of 1814, which proved to be stridor abdominalis. Some time previously, she had been subject to occasional attacks of fever, great weakness, and want of appetite ; symptoms, which were now constantly present,—being about midsummer in the same year, and when I was first consulted.

Her pulse, in the morning, ranged from 90 to 100, and was concentrated ; and, in the evening, from 70 to 80, with its diastole augmented. This variation, however, happened not always at the same periods of the day. Her tongue had always a yellow aspect, dappled towards the root, and

often furred, especially in the morning: but had little thirst. Urine, in general, somewhat high, occasionally rather turbid, and sometimes, though seldom, natural. Her appetite was bad;—her countenance pale, and somewhat sallow;—and had latterly grown much thinner.—Complained, also, of pain and weakness in the loins and lower extremities, with, occasionally, leucorrhœa;—but was regular, though the discharge was scanty and pale. She rested well in the night, and was often disposed to sleep in the day-time, particularly towards evening. When in bed, she could seldom fall asleep till her lower extremities were raised higher than her head. In the morning, on awaking, she mostly complained of a severe pain in the forehead, which was always proportionate to the previous soundness and duration of sleep; but this either gradually left her, or was moderated in the course of the morning. She had a constant sense of chilliness in the day-time, with seldom any increased heat, or moisture on the skin, excepting in the morning. Her bowels were obstinately constipated, and attended with a distressing tenesmus, insomuch, as to be without a motion for a week, ten days, or even longer, unless she had recourse to some drastic purgative. Her stools consisted generally of small dark-coloured scybala linked together, often accompanied with mucus, and voided with great difficulty; and now and then, along with them, small and thin pieces of inspissated or hardened

lymph, of the colour and consistence of cheese-parings, were observed ; and, in two instances, she parted with a few white pulpy granules, resembling boiled French-barley.

The noise within the abdomen was sometimes very troublesome and frequent, for several days successively, and of five or ten minutes' duration ; after which, for a few days, it was little heard. During the time of labour, or active exercise, excepting now and then, on ascending a steep hill, it was generally moderated ; but, on resting, would return with increased violence. It sometimes came on from eating, but oftener when the stomach was empty, in which case taking aliment generally abated it. Sighing would also cause a return of it for a few seconds.

This stridulous sound was, as is always the case, contemporaneous with, and dependent on, the action of respiration ; but the verberation was about three inches from the navel, and in the direction of the spleen. At this point, when respiration was suspended, she perceived a pain, which shot towards the stomach, and induced sickness ; and, in the intervals of this ventral perturbation, she often complained of pain at the præcordia, which darted transversely towards the spine, and thence down the left side, where the beating was felt ; and which was always relieved as soon as the noise commenced. In addition to these pains, she occasionally complained of others shooting below

the navel ; and, if this part were forcibly pressed, whilst in the recumbent posture, a peculiar sound was emitted, such as she was unable to describe.

On examining the spine, the third and fourth lumbar vertebræ were found pushed some little forwards ; and, towards evening, I thought, inclined a little to the left side. On pressing on each side of the spinous processes, she perceived great pain, especially on the left side, for the space of about half a hand ; but, on the contrary side, this was far less considerable. She was confident that the distance between the two ilia was greater than formerly. In the evening, the distortion generally appeared greater, and the hypogastrium considerably swollen.

Notwithstanding, after the distortion in the loins was arrested, the rest of the spine gradually assumed a change of form. Thus, the dorsal arch was more incurvated, or formed a greater segment of a circle ; and, to counterpoise which, the cervical vertebræ inclined forwards, with the head in a vertical direction. Caustics were applied to the seat of the pain in the loins, on each side of the spinous processes, and, from this time, the ventral noise left her for seven weeks ; but, at the end of that period, on incurring some disappointment, it returned in a partial degree.

The citrate of potass, and the cathartic mixture, combined occasionally with a few grains of calomel, and clysters, were prescribed ; to any of

which, however, she only now and then had recourse. For fourteen months, her caustics were kept open, and, during this period, she gradually improved in health: as her appetite increased, her bowels became more regular; the swelling of the abdomen subsided, and she was freer from pain: there was, however, less variation in the state of her tongue and pulse, as the former retained in part both its colour and fur, and the latter never reached the healthy standard, and still observed the same variation.

After her caustic-issues were healed, she gradually obtained more flesh and strength for three months; but subsequently again grew thinner, with a partial recurrence of pain in the head, lower extremities, and, occasionally, in her back, with an increased tendency to constipation; yet the noise within the abdomen continued to be less frequent, and of shorter duration, but, she thought, somewhat louder.

In this state she continued, with little variation, for a year and a half, after the issues were healed: notwithstanding, she remained in servitude. She now consented, as costiveness and occasional tenesmus still prevailed, to the introduction of a large bougie, of the thickness of a middle-sized index finger, up the rectum for an hour or two each day. This passed with ease for about four or four and a half inches, and then gave considerable pain; which seemed to grow less on every subse-

quent operation.—It was, whoever, repeated only five or six times, in consequence of her obstinate refusal to submit to it any longer; but its effects were such as to relieve both costiveness and tenesmus for a while; though, in other respects, no alteration was produced.

Soon after this, she took the sulphate of iron, in solution, twice or three times a-day, beginning with two grains, and gradually augmenting the dose. This increased her appetite, as well as excited some unnatural heat; and, after continuing it for three weeks, she was seized with a very severe attack of *cynanche tonsillaris*,* attended with much fever, and which terminated in suppu-

* This affection, after two or three days from its commencement, which may chiefly be employed in emptying the first passages, seldom requires any active or positive means of treatment; particularly, any farther attempts at resolution, which are sometimes employed to the manifest injury of the patient; for in this species of phlegmonous inflammation, where there is much of the *vis a tergo*, resolution can seldom be effected, and the means employed for this purpose will retard suppuration; but, at length, nature will triumph over her officious antagonist, and perform her own work, though incompletely. On the contrary, when this process is uninterrupted, two important advantages are obtained, namely, a speedy termination of the morbid symptoms, after rupturing, and a more decided renovation of health; for it often happens, that this has previously been deteriorated by some chronic affection, such as dyspepsy, flying pains in the body, &c.

In the first stage of *cynanche tonsillaris*, there are often pains in the thorax, as well as in the head, throat, and other parts;

ration, and large ulcerations in the throat. Her recovery, however, from this affection was speedy, and her subsequent health rapidly improved, and has continued good to the present time, being the spring of 1817 ; but stridor abdominalis occasionally returns, particularly on being exposed to the cold air.

and these, as suppuration advances, will proportionably concentrate in the throat ; but, if resolution be obtained, particularly by active means, these will remain unsubdued ; and, under such circumstances, I have known a few instances where *phthisis* has succeeded ; but it far oftener happens, that the patient complains of great weakness, and defective appetite, along with these pains, for some time, till there is either a return of the complaint, or some feverish attack, accompanied or followed by some critical evacuations, which fail not, if nature be unmolested, to restore the health of the sufferer.

When suppuration is formed, the abscess, perhaps, ought never to be opened, excepting under the apprehension of impending suffocation ; for, in proportion as this operation is prematurely resorted to, the ulcer heals less kindly, the subsequent health is less complete, and the greater is the liability to a return of the complaint. When, however, the powers of nature are weakened, or, from a want of re-action, suppuration advances slowly, small doses of the bark, or some gentle stimulants, may be given with good effect.

Before quitting this subject, which may seem out of place, there is one circumstance I shall mention, as peculiar to this complaint, though of no practical import, namely,—when one tonsil is inflamed, the half of the tongue, on the same side, is more discoloured ; and which is often the case in inflammatory affections of the chest and appendages, when the inflammation is confined to the same side.

Six months after the above was written, little alteration was observed. The abdominal croaking still occasionally returned, and her headach was sometimes troublesome, though relieved every six weeks or two months, when severe, by an attack of epiphora, for a few days; especially of the right eye, attended with a slight inflammation of the palpebræ. The pain, which occupied uniformly the forehead, was by this discharge materially relieved, for several weeks, particularly on the right side.

The pain, also, in the loins was still felt after much labour, and always when the spine was suddenly bent backwards; but, in other respects, she appeared in good health; although her bowels were still tardy, with some difficulty in voiding her stools.

CASE IV.

ANN H. æt. 26, a stout unmarried woman, of a scrofulous habit, and having an uncommonly large chest, about five years ago, found herself indisposed from frequent pains in the loins, and in the anterior part of the left iliac region, as well as in different parts of the head, occupying sometimes the whole of it, and affecting her sight so much, as frequently to disable her from distinguishing the

letters of a moderate sized print, and even, occasionally, colours.

She continued in this state for six months, with little alteration ; but, at the expiration of this period, was seized with epistaxis and vomiting, preceded by an aggravation of pain in the back and side. This attack returned daily, for several weeks, at pretty regular periods, and lasted two or three hours, after which it ceased.

Subsequently, for a year and a half, she experienced little change, excepting an increase of pain and weakness in her back and lower extremities, on exercise, or lifting weights : however, at the end of this period, she had occasion to take a journey of about twenty miles ; and before this was accomplished, she was seized with fever, and some exanthematous eruption (I suppose, urticaria). For this affection she took medicine, which, she supposed, struck it in, and made her worse, by swelling the legs and abdomen, and causing tenesmus, slimy stools, and difficult micturition, attended with great heat of the body, and profuse perspirations ; to which, also, an increase of heart-burn, and occasional vomiting, with acidity and flatulence, soon succeeded. The catamenia became thinner, and more purplish, as soon as symptoms of stridor abdominalis commenced, which was about this time, being the end of two years from her first attack of indisposition.

Previously to the last six months, the noise with-

in the abdomen came on frequently in the day-time, and lasted from ten to twenty minutes, and never whilst sitting or lying, but always either when standing, or taking loco-motive exercise. Latterly, however, this noise and pain in these parts already mentioned, especially in the side, had increased both in violence and frequency. The stomach had become more disordered, and her urine more variable, sometimes depositing a copious settlement on standing, when high-coloured and made in small quantities; but, on being more copious, paler and without deposit. Costiveness, which had hitherto prevailed, now began to alternate with looseness; for instance, after being without a motion for several days, she would have a costive stool, composed of small scybala, intermixed, occasionally, with such small substances as mentioned in the last case, and voided with pain and difficulty; the second, and perhaps the third, would be partly feculent and partly purulent. These were followed by others both purulent and bilious, and of a different colour, being often greenish, frothy, and always extremely offensive. During this latter period she had tenesmus, or great difficulty in going to stool, and was sensible, from this circumstance, and the appearance of her stools, that there was contraction of the gut; and she was the more confirmed in these suspicions, from the volume of her fæces being flattened, when in a semi-costive state. The pain, also, in her side, which

had now become severe, was always aggravated before the return of diarrhœa, and as often relieved by it.

At this time, being early in the spring of 1814, when I first saw her, she complained, in addition to the state already described, of more general weakness, with defective appetite. The pain at her stomach, heart-burn, and faintness, were increased ; but the last of these symptoms was generally relieved by whatever was taken into the stomach ; although it mostly aggravated the pain in her side, which was sometimes dreadfully severe, and which, she said, was either occasioned or augmented by something passing through a straight part in her side. Be this as it might, it seemed evident that the peristaltic action of the bowels increased it. Eating, also, had generally some influence in stilling the noise ; and buttermilk, in particular, had the most expeditious effect. She had still frequent rigors, or rather habitual chilliness, with some heat, especially in the night, succeeded sometimes by perspirations on the upper part of the trunk and head. Her pulse ranged from 84 to 96, and was variable in the day-time ; her tongue, also, was whitish, somewhat furred, and inclining to a yellow tinge ; but she had little thirst.

On pressing on the third and fourth lumbar vertebræ, she complained of considerable pain, and these bones appeared, in a trifling degree, shrunk forwards from the unusual prominence of the lon-

gissimus dorsi and sacro-lumbalis muscles ; and the left iliac region appeared drawn inwards ; but without either soreness or discoloration.

The treatment adopted in the preceding cases was here resorted to. The caustics had not only the immediate effect of subduing the pain in the loins entirely, but of suspending the ventral noise for several weeks. In other respects, she also gradually improved, but the pain in the iliac region continued unabated for the first six weeks, and for which a seton was inserted, with good, though slow, effect.

A circumstantial detail of all farther particulars, for the first nine or ten months, would be both tedious and uninteresting. Suffice it, therefore, that she continued uninterruptedly, though slowly, to recover ; but the pain in the side was the most obstinate symptom in giving way.

At the expiration of this period, her pulse was natural ;—tongue nearly clean ;—few rigors, with seldom any increased heat ; appetite tolerable ;—urine natural ;—abdominal croaking occasional ;—bowels less irregular ; but yet inclined to costiveness ;—and the pain in the side still felt in some degree, especially from the peristaltic action of the bowels.

She now had a large bougie introduced into the rectum, as in the last case, which gave her considerable pain after it had passed about four and a half inches. This operation, I believe, deterred

her from continuing her attendance. Soon after this, she dried up her issues, and, in a short time, grew stout and lusty, and was enabled to go about her household business as formerly. A twelve-month afterwards, I had the satisfaction to learn that she still maintained this advantage.

REMARKS.

The above may be considered a case of the *colica callosa* of Cullen, and is seldom met with in practice. Dr. Parr never saw above four of these cases, which, it appears, admitted of little or no relief. Mr. Good also mentions, at the time of publishing his learned work on Nosology, having three cases under his care; but it does not appear that he was capable of affording them any material advantage. In the above case, as the use of long-continued drains was productive of good effect, might not, therefore, this remedy, under similar circumstances, be had recourse to with great propriety?

CASE V.

MARY HEYWOOD, æt. 17, and rather tall and full chested, with large upper extremities, about twenty months before I saw her, had been seized with stridor abdominalis, which had gradually increased in violence till I was consulted. About ten months after her first seizure, menstruation had commenced, but the periods of which had been very irregular, sometimes returning every ten days or a fortnight, but oftener every six, eight, or twelve weeks.

Since the first attack of stridor abdominalis, her health had sustained no material derangement.—At this time, however, she complained of anorexia, and general languor ;—pulse ranged from 74 to 86, and varied much in the course of the day, from slight exacerbations and remissions of fever. Had much stupor and chilliness in the day, which were succeeded in the night by some increased heat. Her bowels were constipated, and urine generally rather high-coloured, with little sediment.

The noise often troubled her in the day-time, but was of no definite continuance, though she thought that this was nearly equal to the intervals between the attacks ; and it generally returned in about three minutes after the commencement of a meal. The beating in the left side was most dis-

tinctly felt about two and a half inches from the navel transversely.

Of late, she had grown thinner, with a partial loss of complexion ; and complained of pain, occasionally, in the loins, and lower extremities, with weakness on taking moderate exercise, or on long standing, together with dyspnœa ; but was free from cough. A distressing pain often seized her, about an inch above the spine of the right ilium, which was aggravated by bodily exertion. Pressure upon the part, or a return of the noise in the bowels, seldom failed to relieve it. Sickness, attended with headach, and a vitiated taste on rising in the morning, were prevalent, and, in the day, faintness would often return, and as often be relieved by some aliment, which would, now and then, allay the croaking also.

On pressing about the third lumbar vertebra, considerable pain was excited ; and the spine, at this part, seemed to incline some little to the left side. As this young woman, however, refused to submit to such remedies as were thought necessary, I was obliged to content myself with recommending to her rest, and a milk diet.

After a lapse of three years and a half, I again saw this patient, and found no material alteration in the state of her case. Her appetite was still faulty, and she was labouring under dysmenorrhœa, with an ink-like, defective, and very offensive discharge. The functions of the bladder were also

impaired. This was evinced by frequent micturition, preceded by pain in that viscus. The stridor abdominalis was still troublesome, particularly in a forenoon, and was preceded by faintness, and sometimes attended with pyrosis. Costiveness and cephalæa were somewhat less prevalent ; but she was yet incapacitated from lying on the right side ; and could lie on her back only for a few minutes together.—Urine as formerly,—tongue somewhat more furred, yellow, and dappled towards the root,—pulse at 72, and fuller. General chilliness and excessive coldness of the lower extremities were present in the day, succeeded, now and then, by some little increased heat in the night, but without perspiration. The pain in the iliac region had vanished, and that in the loins was dull and heavy, and perceived the most at bed-time, at which period, after having had much work, she was constrained to incline a little forwards for ease ; but if, while in this posture, she suddenly threw back her head and shoulders, this pain was very acute. She appeared thinner, with a farther loss of complexion, which in health had been very ruddy. She still complained of an unpleasant taste in the morning, which was sometimes similar to that of burnt bread, but oftener like that which is perceived after eating onions. In the night-time she was also frequently attacked with the cramp in the lower extremities, especially in the calf of the left leg. Her stools were sometimes slimy, yet voided

without difficulty ; but she appeared to have the ascarides.

On re-examining the spine, the third and fourth lumbar vertebræ were found to be nearly in the state I had before left them, with the trifling exception of having advanced, as I thought, some little more laterally, as well as in a trifling degree anteriorly ; and, on pressing on this part, she complained of more pain than formerly.

In order to obviate costiveness, and as she was troubled with the ascarides, an aperient vermifuge* was prescribed, along with caustics to the loins. Subsequently for a week nothing of the abdominal noise was heard ; but, at the expiration of the third week, her pulse had got up to 94,—her thirst was considerable,—tongue somewhat more furred, and cephalæa intense, with other symptoms of increased febrile action ; but the pain in the loins had vanished.

The citrate of potass was now ordered in addition, and, after taking it a month, her pulse had come down to 78,—no thirst,—and her tongue clean, without discoloration,—taste natural,—appetite good,—complexion healthy,—and she had obtained substance. No chills, rigors, or unnatural heat :—slept well,—bowels, stools, and urine,

* R. Sulphuris sublimati, 3fs.

Magnesiae, grs. xvj.

Pulv. Jalapæ recentis, grs. iv. M. fiat pulvis nocte maneque alvo astricto sumendus.

natural. The distortion, also, was considerably diminished, and stridor abdominalis faint, and but seldom heard.

The caustics discharged well, and, no doubt, proved the grand remedy, for she paid but little attention to the orders enjoining the recumbent posture. Two months afterwards I found this patient rid of all the complaints.

CASE VI.

ELIZABETH WOOD, æt. 26, and of a scrofulous habit, applied at the Dispensary in the summer of 1814, in order to be relieved from toads or frogs, which, she was confident, infested her belly.

About five years previous to this time, and a month after her accouchement, on lifting a cradle and child, she had strained her loins, and the consequence had been a severe pain, insomuch as to have drawn her double-fold for a couple of months; and ever after this, on catching cold, she had been similarly affected for a week or ten days. Fourteen months before I saw her, she had fancied herself pregnant, from a partial obstruction of the menses, and enlargement of the hypogastrium, especially in the evening. The pain, which hitherto had been occasional, had now become more constant, but less severe. These symptoms, without any modi-

fication or abatement, had continued for nine months, when the catamenia ceased. At the end of the last-mentioned period, stridor abdominalis had commenced, and had generally been preceded by faintness and craving for food, and mostly stilled soon after receiving it into the stomach.

At the time of her application, the stroke in the abdomen, given by respiration, was confined to a point in the left umbilical region about two and a half inches from the navel transversely. Her pulse was soft, somewhat contracted, and varied frequently from 76 to 86 in the course of the day; during which she complained of much chilliness, that was succeeded, in the evening and fore-part of the night, by some unnatural heat, but seldom by any perspirations. She was costive, with frequent tenesmus; and voided a good deal of mucus, which she called *toad-slobber*, and which she advanced as one reason for thinking that she had these animals within her. Her urine, as to quantity, was variable; when small, it was somewhat high-coloured, and deposited a mucous settlement; but was mostly without sediment when copious. Her tongue was rather furred, and her appetite, also, very indifferent; and she had grown considerably thinner.

This poor woman was so strongly impressed with the idea of having toads or frogs within her, as to imagine them creeping to and fro in her bowels continually; and she highly resented any opinion that contravened this delusion.

She had been under the care of several practitioners, some of whom were respectable ; and the last was a physician of considerable eminence, who prescribed for her the *decoct. aloes comp.*, which she took for about ten weeks with no advantage.

On examining the spine, little displacement was perceptible ; yet, I thought the middlemost, and the lowermost but one, of the lumbar vertebræ, were, in a slight degree, pushed forwards ; and, on applying moderate pressure to the part, she complained of great pain.

Caustics were applied to the loins, which continued to discharge well for eight or nine months, with great advantage ; and from the first superinducement of pain from these, a general amendment commenced ; as the chronic pain in her loins entirely ceased, her appetite improved, and she gradually regained her usual health and strength ; but the noise within the abdomen had not quite left her, though greatly lessened, neither were her stools yet quite natural, or entirely free from mucus.

The medicines prescribed were the saline mixture, the muriate of lime, and, when costive, four grains of aloes, with half a dram of the supertartrate of potass, at bed-time ; and, in lieu of which, occasionally, a few grains of calomel were substituted, with a dose of the cathartic mixture the following morning.

CASE VII.

ELIZABETH SHORE, æt. 18, of a scrofulous habit, with a long and slender spine, about fourteen months before her admission, had been siezed with stridor abdominalis, which had gradually increased in degree and frequency, but without much injury to her health, till six weeks before this period, when she had been attacked with hæmoptysis, pulmonary inflammation, cough, &c. which continued till admitted at the Dispensary, in the autumn of 1814; at which time she appeared seriously ill, as she still laboured under cough, considerable expectoration, night-sweats, and irritation within the chest; and it was not before these symptoms were somewhat abated, that stridor abdominalis, and the nature of the pain in the loins, were discovered. At this time, the noise within the abdomen was mostly disposed to come on, and be aggravated, from an empty stomach, and frequently on resting from fatigue; and which was sometimes, though not always, relieved by food. The beating, which accompanied the noise, sometimes lasted more than forty minutes, returning several times, or frequently in the course of the day, and was felt about $2\frac{1}{2}$ inches from the navel, transversely, on the left side. At this point she had frequently pain, which shot upwards in the direction of the stomach, there-

by causing sickness, and, occasionally, vomiting; especially when she held her breath, which in company she was often constrained to do, from a sense of shame, when the noise was prevalent.—The pain in the loins, at the close of the day, and after either long standing, or much exercise, was considerable, attended with weakness, and some pain and torpor in the lower extremities.

Her pulse was soft, and ranged from 100 to 115, and was generally, though not always, at its maximum in the evening. Her chilliness or sense of cold during the fore-part of the day, was excessive, and succeeded by increased heat in the evening, and early part of the night; and terminated in perspiration. Her bowels were constipated, with frequent tenesmus, and, occasionally, with mucous stools; and her urine was somewhat high-coloured, small in quantity, and often voided with pain. Her catamenia were defective;—her thirst was moderate;—but her tongue was whitish, slightly furred, and inclining to the yellow tinge.

On pressing on the lumbar vertebræ, particularly the middlemost, she complained of great pain; and this, as well as the two adjoining vertebræ, were projected a little forwards, but more especially inclining to the left side; though much less than might have been expected, as the disposition to lateral displacement must have been considerable, from the circumstance of having a long spine, and lying constantly on the left side; as well as from an

increase of superincumbent pressure arising from the nature of her daily employment. From this change of structure in the part, the two great extensor muscles of the loins appeared a good deal approximated.

Caustics were applied to the loins, and small doses of the powdered digitalis, (gr. ss. three times a day,) with the citrate of potass, were prescribed, together with demulcents, for her cough; but, notwithstanding this plan was persevered in for nearly three months, yet, in consequence of her pulmonic complaint, she continued in a very precarious state. After this time, however, she began unexpectedly to recover, and was discharged, after having been five months on the books, in good health; though the croaking still returned occasionally in a slight degree, especially after a hard day's work; but the distorted part of the spine had nearly recovered its natural shape.

REMARKS.

Although this young woman's complaints remained nearly stationary for some months, yet I am persuaded that, had she been in a situation which would have enabled her to have rested, and screened her more from the cold, her recovery would have been greatly expedited; for it was not till she, in part, adopted these means, that she obtained any material advantage. Moreover, it is evident, from

the considerations already stated, that the distortion in the loins was principally occasioned from mechanical agency; for, although the caustic-issues discharged well, and abated both the pain in the loins, and the stridulous noise, yet, in all other respects, she obtained little advantage till the superincumbent pressure was lessened.

CASE VIII.

ANN GLEDHILL, æt. 20, a young woman of a very delicate form, and tainted with scrofula, was attacked with pain a little above the left ilium, subsequently to the commencement of a stridulous noise within the abdomen, which she had first perceived about six months before I saw her, and which still continued, and was always preceded by faintness, and relieved by taking nourishment.

When admitted at the Dispensary, she complained of pain in the loins, as well as in the iliac region, about an inch above the spine of the ilium, on the left side; and a similar pain she also occasionally felt on the right side, in an opposite direction. These pains had been more troublesome for the last three months, having been always aggravated by walking, or long standing.

Her pulse, on admission, was from 100 to 110, and soft, and she had much chilliness in the day-

time, succeeded by heat: her tongue was furred, and of a yellowish tinge, but she was seldom thirsty.—Urine sometimes high, with a mucous sediment of a lateritious cast. Her appetite was bad ;—bowels costive ;—skin dry ;—and she had lost her complexion, and much flesh, and appeared weak and languid. She could lie on both sides, but preferred sleeping on the right, which she attributed to custom. A severe pain in the forehead, during the day, often distressed her. This was confined to a part, about three-quarters of an inch above the nose, and rather inclining to the left side, and occupying a space that she could cover with the end of the finger, and which induced her to lie down for a while. She had always been irregular, her catamenia returning sometimes every six, but oftener every ten or eleven weeks, and latterly very deficient.

The croaking returned every hour or two, when the body was erect, and continued from five to ten minutes, unless allayed by taking nutriment.

She attributed the pain in the loins, and iliac regions, to carrying a heavy child daily, in her left arm, (for she was a nurse-maid,) which caused her to lean to the right side. Independently of this cause, indeed, there did not appear, from the natural structure of the body, any other particular superincumbent weight ; for her form, though delicate, was well proportioned.

On pressing on the loins, she complained of

great pain between the third and fourth vertebræ, both of which were distorted some little forwards, but more especially to the left side.

Caustic-issues, an emetic, the citrate of potass, and the cathartic solution, as well as the recumbent posture, (but which was little attended to,) were prescribed her. On the application of the caustics, the stridulous sound within the abdomen left her; and, in two months, her pulse was at 90,—her appetite had increased,—she had obtained more flesh and strength,—and the pains in the loins and neighbourhood had for some time vanished: her urine, also, was more natural, and her bowels regular, without the aid of cathartics.

This young woman remained on the books ten weeks longer, during which she continued gradually to recover, and was discharged in good health, having regained her former look and strength; and the croaking seldom returning, and never but under the circumstance of faintness, arising from the want of food. She had now, also, become regular, and no vestige of spinal displacement any longer appeared.

This patient, previously to her admission, had lived in service, in the character of a nurse-maid, as already mentioned; and had been under the care of a respectable medical man at York, for ten or twelve weeks, with little or no advantage; but, on the contrary, during all this while, had grown thinner, with a gradual declension of strength and spirits.

CASE IX.

ELIZABETH FOZARD, æt. 19, of the middle size, and well formed, but of a scrofulous diathesis, was admitted a patient of the Dispensary, in the latter end of April 1815, and said, that, about two years previous to her admission, she had first felt a pain in the loins, which had continued either more or less from that time, especially on long standing, walking, bending, or straightening the spine. In addition to this, she complained of a more severe pain, about an inch above the most prominent part of the left ilium. During all the above time, she had been weak, languid, and, by her own account, not without fever.

When admitted, her pulse averaged 106, but varied in the course of the day. Her thirst was inconsiderable, though her tongue was rather furred, and yellowish;—had constant chilliness or slight rigors in the day-time, succeeded by heat, and frequent perspirations in the night. She often experienced faintness, which was succeeded by, or attended with, the croaking of the bowels, which lasted ten or fifteen minutes, unless allayed by nourishment. This noise returned frequently when the spine was erect, yet could not be certain as to the time of its commencement, though she thought it might be nine or twelve months before I saw her.

During the day, she was often afflicted with a pain in the occiput, which, varying in point of violence, and inclining to the right side, now and then shot towards the right eye. Her urine was sometimes high-coloured, and small in quantity ; at other times paler and more copious. Her bowels, also, were constipated, and she was often troubled with the hæmorrhoids. She was regular, but the catamenia were deficient, and unnaturally dark-coloured ; and she always complained of uncommon weakness in the lower extremities on much walking or long standing. She always slept on her left side, but was debarred from this enjoyment when on the right, though she could lie on it whilst awake.

The point at which the verberation was felt, was nearly three inches from the navel, and obliquely upwards in the direction of the spleen.

On pressing on the middlemost, and lowermost but one, of the lumbar vertebræ, she perceived great pain ; but no displacement of the bones was exhibited.

The same treatment that was adopted in the preceding case was here prescribed, but with more expeditious effect ; as she daily advanced towards convalescence : and, notwithstanding the ventral noise returned, after she had been nearly three weeks without it, subsequently to the application of the caustics ; yet, at the time she applied for her discharge, which was ten weeks after her admission, this seldom returned oftener than twice

or three times a week, and was of only a few seconds' duration. When dismissed she had grown lusty, and appeared, in all respects, in good health; but, contrary to orders, had healed up her issues.

CASE X.

MARY GIBSON, æt. 28, and a married woman, who had born five children, about seven years before I saw her, had had the misfortune, on passing down a flight of stone-steps, to fall and hurt her loins severely against the front edge of one of them; and, ever after, had occasionally been troubled with pain in the injured part, especially on stooping down or rising up; but oftener, on lifting weights, or making a false step in walking, or on long standing, as from washing, &c.

For five months previous to her admission this pain had grown worse, and more constant, and had appeared to be connected with another pain, an inch above the most elevated point of each ilium, and which passed sometimes anteriorly, so as to produce a sensation as if girded. During this time it appeared, from her own narrative, that she had laboured under fever.

On her admission at the Dispensary, which was in the summer of 1815, her pulse ranged from 90 to 104;—her appetite was indifferent;—her tongue

whitish, and somewhat furred, with a shade of yellowness; and she had some little thirst.—Urine, in the morning, often high-coloured, and, on standing, exhibited either a supernatant scum or greasy pellicle, or deposited a mucous sediment of a lateritious complexion; but, in the day-time, paler and more natural. Ever since her fall, her bowels had gradually become more confined, latterly with tenesmus, and slimy stools, which occasionally had been flatted; and, in proportion as constipation prevailed, the pain in the loins was the most severe. Though summer, she was remarkably chilly, and very susceptible of the cold, during the fore-part of the day; but from two p.m. to the same hour in the morning, had some increased heat, seldom succeeded by perspiration.—Complained of a tumefaction of the hypogastrium, which commenced, periodically, about six o'clock in the evening, and subsided about midnight, leaving, in the morning, a greater degree of soreness in the part than at any other time. Weakness, and some degree of torpor in the lower extremities, were present, which, together with pain in the back, often compelled her, in the day-time, to sit down; and, in the night, this pain often prevented her from sleeping till two o'clock in the morning.

The croaking in the abdomen had come on within the last six months, so as to engage her attention; and more particularly for the last ten

weeks, after the catamenia ceased, in consequence of pregnancy ; although, for some time previous to the former period, she had experienced a slight degree of it. This noise now returned frequently in the day, continuing four or five minutes, and sometimes longer, and was always preceded by faintness, both of which were relieved by eating ; —the former being connected with a beating in the left side, nearly three inches from the navel, and in the direction of the spleen ; and was governed, as is always the case, by the action of the diaphragm.

She had been afflicted with cephalæa for the last two years, which still continued, and came on frequently in the day-time ; but, in general, was most severe on rising in the morning, when it would afflict her for an hour or two, and sometimes longer, before it abated. It was sometimes confined to the course of the coronal suture, at other times to the forehead, particularly along the superciliary ridges, and caused her eyes to smart and water.

That part of the spine composed of the third and fourth lumbar vertebræ, in particular, was found jetting somewhat forwards ; but I could not perceive any lateral declination. In this part she complained of much pain on pressure ; and I thought there appeared some loss of substance in one of the spinous processes.

The plan adopted in the two preceding cases was here resorted to, and from the commencement

of which, she began to recover, as her pains and stridor abdominalis abated ; and, after continuing her attendance at the Dispensary for eight or nine weeks, I heard nothing more of her for some time, till I learnt that she died rather suddenly a few weeks after her accouchement ; and, that a fortnight or three weeks previous to her delivery, she had dried up her caustic-issues : but the particulars respecting her death, I have not yet satisfactorily learnt.

Since writing the above, I have been favoured with some particulars of this patient's death, by her accoucheur ; from which it appears, that, after having had a favourable recovery, for the first three weeks of her confinement she began to complain of a pain, and some soreness and tension, in the iliac region, which soon extended towards the navel, and were accompanied with some fever. These symptoms, after continuing three or four days, without confining her to bed, suddenly became aggravated and distressing for ten or twelve hours ; after which, from a cessation of the pain, she appeared calm, and composed, for a few hours, and then expired ; but I have not learnt that the pain in the loins ever returned after her issues were healed.

CASE XI.

MARY BRADFIELD, æt. 16, in the summer of 1815, was admitted at the Dispensary, after having been ill a twelvemonth, as she thought, from a cessation of the catamenia ; for, in two months after this event, she had been attacked with pain in the side, dyspnœa, cough, and fever. Bleeding and blistering, however, had abated these symptoms in a week or ten days, by, as she supposed, having translated the pain to the loins, to which, in a few days, stridor abdominalis had supervened, together with a return of the cough and dyspnœa, that had continued either more or less ever since.

Her pulse, on admission, was at 112,—soft and contracted ;—tongue whitish, with a faintly yellow tinge, and rather furred ;—and was not without thirst. Her appetite was indifferent, yet she had not wherewith to supply the cravings of nature. She was almost constantly chilly, with seldom either heat or perspiration.—Urine often somewhat high, with a mucous deposit, but sometimes natural.—Cough and dyspnœa troublesome, especially on exertion, or on lying down, or rising in the morning ; and experienced great weakness in the lower extremities, particularly in the ancles, which swelled towards night, after long standing, or much walking-exercise.

The whole of the abdomen, from the umbilicus to the pubes, was tumefied, but the enlargement was more apparent on the left side; and was sore to the touch, and always increased in size in the evening. She was unable to sleep on her right side, and lay with uneasiness on her back, consequently rested on her left side. Her bowels were constipated, but she voided her stools, which were natural, without much difficulty.—Complained frequently of faintness in the day-time, which, if not relieved by some refreshment, degenerated into sickness; and, about the middle of her repast, stridor abdominalis returned, and always relieved any unpleasant sensation at the stomach. This noise usually lasted from five to ten or fifteen minutes. The beating in the left side was two and a half or nearly three inches from the navel, and in a direction towards the spleen.

On examining the spine, the middlemost and fourth lumbar vertebræ were found to jet forwards, thereby leaving a considerable hollow both to the eye and touch; but the principal part of this indentation was between these two bones. The remaining lumbar and dorsal vertebræ, above this part, formed an increased arch, as far as the cervical vertebræ, which had begun to make a counterbend, with the occiput reclining rather backwards. On pressing on the hollow part of the loins, she felt great pain.

An emetic, the citrate of potass, along with

small doses of digitalis, (gr. ss. of the powder three times a day,) with, occasionally, the cathartic mixture, were prescribed her. These means alone were persisted in for a month, in order to ascertain what progress could be made without the aid of caustics. At the expiration of this term, notwithstanding there was some appearance of amendment, as her pulse was reduced to 106, and she had obtained some flesh and strength, which I attributed to a more plentiful table; yet, in other respects, there was no alteration: it was therefore thought advisable no longer to delay the caustics. Three weeks after their application, little advantage having been derived from them, save some little relief of the pain in her loins, she was attacked with a copious hæmoptysis, which was followed by no further change in the state of her case, except an increase of cough. She was now ordered to confine herself within doors, in consequence of the autumnal cold having set in, and the horizontal posture was more strictly enjoined; for, hitherto, her necessitous circumstances had compelled her to follow some easy employment.

Henceforth, for some weeks, I heard nothing of this patient, till I learnt that she had dried up her caustic-issues; and that her mother had administered to her a small quantity of steel-filings, which had restored the menstrual discharge in a slight degree, and had afforded her some relief. From this time she ceased to be a patient of the Dispensary.

This young woman was of a fair complexion, well-formed, and prepossessing in her person ; but she was of a scrofulous habit, and had been employed in the cotton-manufactory for some time, but not in such work as, she thought, could injure her loins.

From the length of her indisposition she had been reduced to the necessity of applying for parochial relief ; but which was either withheld, or sparingly afforded, on the supposition of her being pregnant : the consequence was, that, on her admission, she was actually suffering from the want of proper nutriment. On this privation, however, being obviated, she soon began to improve both in her look and spirits.

Nine months after this young woman was discharged, she still continued to languish, and appeared much reduced in strength and substance ;—her cough was more frequent, and hacking, but with only a frothy expectoration ; excepting in three instances, during this interval, she had spit up a quantity of blood, and once, several ounces, as she supposed. Her pulse was weaker and more frequent, and her breathing was more obstructed ; but, in other respects, there was no material alteration. Her catamenia had not re-appeared, and she now suffered great distress from being unable to lie in any position, save on her left side. The indentation in the loins appeared larger, and the spine, at this point, inclined some little to the left

side ; and, on pressure, she complained of more pain than when last examined. The pain in her head, night and morning, was also more considerable ; but, notwithstanding this aggravation of the symptoms, there were no colliquative evacuations. The abdominal noise still continued, and returned in bed as well as when she was erect ;—but, in three months farther, it entirely left her, and was soon succeeded by ascites and œdematous legs, with excessive debility, all portending an approaching dissolution. At this time, the dyspnœa was increased, and her cough dry, and as troublesome as ever ; and she was still incapacitated from lying in any other position than on the left side, which continued a source of much distress to her.

CASE XII.

GEORGE PLATT, a tall and handsome young man, æt. 23, and whose mother was highly scrofulous, consulted me in the month of June, 1815, and stated, that he had been gradually losing his flesh and complexion for the last two years ; and had, occasionally, been affected with pain in his loins and lower extremities, with some degree of torpor and weakness ; all of which symptoms were aggravated by long standing, or much walking-exercise ; and which had gradually grown worse.

During a great part of this period, his appetite had failed him, and his thirst had increased. He now complained of constant rigors, or excessive chilliness in the day-time ; and this symptom had distressed him, particularly during the last winter, insomuch that he could scarcely at any time keep himself warm.—Had no nausea, nor vomiting ;—but, for the last six months, had had frequent, though slight, attacks of stridor abdominalis, during the day. This noise generally came on in a minute or two after taking refreshment, if preceded by pain at the stomach, or faintness, which was generally the case ; and the verberation accompanying it was in the left side, nearly three inches from the navel, and in the direction of the spleen. His bowels were, and generally had been, costive ;—had now some heat in the evening, followed by frequent and profuse perspirations in the night ;—pulse also full, and at 62 ;—and his tongue was furred, and yellow, particularly towards the root, with considerable thirst. His urine was high, especially in the morning, with a mucous deposit of a lateritious tinge. He had, also, some little increase of pain in the loins, either on stooping down, or rising up, or on turning himself in bed. He slept on the left side with most ease, though he could bear to lie on the right, but not so comfortably as on the former ; and was aware he did not sleep on it, as he never found himself, on waking, in that position.

On examining the spine, by pressing on the fourth, or lowest but one, of the lumbar vertebræ, he complained of great pain ; but I could not satisfactorily ascertain whether there was a slight displacement of the bone.

An emetic, the citrate of potass, and cathartic mixture, were prescribed ; and the two latter persevered in for several weeks, but without producing much alteration. Hence caustics were had recourse to, and, in three weeks after their application, he had obtained great advantage, as his tongue was cleaner, his appetite improved, complexion more healthy, and he had acquired substance. The pain in the loins, also, had vanished, and his pulse was at 90, soft, and less full ; and, in three weeks further, at 80, with a natural stroke. The eschars were betwixt five and six weeks in digesting off, leaving, however, very healthy sores, that discharged well.

From the application of the caustics, the abdominal noise ceased ; and, before the expiration of three months, the former were dried up, contrary to the directions given him, on a supposition that his health was re-established ; and which appeared to be the case, if I except the base of his tongue, which was not so clean as I could have wished.

In this state he continued for nine or ten months, employing himself as a clothier, as formerly ; after which his appetite and strength again began to fail, and his complexion to alter, as I afterwards learned.

In this state of partial indisposition, he continued for two or three months, when he determined to marry; but the second night before the intended ceremony, he retired to rest somewhat low in spirits, and was found dead in bed in the morning.

REMARKS.

This case, like many of the preceding ones, fully illustrates the good effects of caustic-issues, and their long-continued use. Had they here been kept open for a more extended season, the prospect of a permanent recovery would have been greater; and here I suggest to the young practitioner the necessity of attending to the state of the tongue, under such circumstances, before he either dries up, or materially diminishes, the discharge from caustic-issues; for, even if the base of the tongue remain furred, and still display the yellow tinge;—and, more especially, if the appetite and general health continue to improve under the discharge, then such a measure would be highly improper. Indeed, the state of the tongue is the grand criterion for regulating our judgment in such cases, as I have before observed, for, as to the pulse, it is less to be depended on;—as it sometimes happens, in spinal affections, as in this case, that the pulse in number is below the standard of health, whilst local mischief is making serious progress. This circumstance may, perhaps, be accounted for on the prin-

ciple of compression, in consequence of inflammation extending to the vertebral theca ; for, as soon as this abates, the pulse becomes accelerated,—a change characteristic of this event, and, generally, to be considered as favourable.

CASE XIII.

ANN WILCOCK, æt. 15, a young girl of a delicate and scrofulous habit, who had not menstruated, applied to me on the 13th of September, 1816, for the cure of stridor abdominalis.

She now appeared somewhat emaciated and sallow, having lost the bloom of health, and been indisposed for many months ; during a part of which time she had been under the care of a respectable practitioner.—Her appetite was defective, and she was thirsty, but her tongue was little furred, though with a shade of yellowness :—pulse ranged from 96 to 106 ;—was habitually chilly, with sometimes rigors, during the fore-part of the day ; which were succeeded by heat in the evening, followed mostly by night-sweats ;—bowels costive, with frequent tenesmus ;—urine scanty, somewhat high, and frequently letting fall some deposit. Complained of pain in the upper part of, and across, the forehead, especially soon after rising in the morning ; as well as in the loins, which was worse during the latter

part of the day, or on lifting weights ; and the pain and weakness, at this period of the day, in her legs were such as often to compel her to rest herself. Though she could lie on her right side, she could only sleep on the left.

The stridulous noise returned frequently in the day-time whilst in an erect posture, and lasted from four to eight minutes, or even sometimes longer ; especially if the stomach were empty, or the accession preceded by much faintness, which it never failed to relieve. The sound and verberation within the abdomen bore their usual character, as the latter was most distinctly felt $2\frac{1}{4}$ inches from the navel, and in the direction of the spine of the ilium. These, as well as any unpleasant sensation at the stomach, were always allayed for a while by taking nutriment.

On examining the spine, the third and fourth lumbar vertebræ were found distorted somewhat forwards, but more particularly towards the left side.*

The citrate of potass, and cathartic mixture, were prescribed, and a couple of caustics applied to the loins ; and, as she had, for some time past, when in health, been in the daily practice of carrying to a distance large pails of milk on her head, which I considered as the chief exciting cause of this distortion, the horizontal posture was enjoined,

* I have not seen a case of stridor abdominalis in which the distortion was to the right side.

with strict orders to confine herself as much as possible to her back, and right side: but this position she would only submit to for a fortnight.

After the application of the caustics, she had no return of stridor abdominalis; and her recovery, in other respects, was exceedingly rapid; for, in three weeks, to my great astonishment, I found her tripping along the streets, as if in good health;—and which, in reality, appeared, in a fortnight or three weeks afterwards, completely re-established.

The caustic-issues discharged little, and soon healed up; the eschar not sloughing off in the usual manner;—but it shrivelled up, and formed a dry scab, from the edges of which some luxuriant granulations shot forth, and from them the whole discharge issued.

REMARKS.

This, as well as Case II., and some others, shews, under the circumstance of age, and especially when the cause is principally mechanical, how readily this complaint gives way: but whether the sudden change in this case can be ascribed more to the caustics than to a fortnight's suspension of the superincumbent pressure is, perhaps, difficult to determine; for it is evident that the discharge from the former was so scanty as to afford no material advantage,—though we must admit, judging from some of the preceding cases, that the stimulus excited by them might have produced considerable effect.

CASE XIV.

ANN CHAPEL, æt. 17, of a scrofulous habit, and rather tall, with a full chest and long spine, applied to me about the close of 1817, on account of defective vision, which had lately alarmed both her and her friends. For the last three years she had followed the occupation of a weaver, and, during which time, had enjoyed good health, with the exception of a few slight attacks of ophthalmia, till about eight or ten weeks previous to her application, when her sight began to fail her. This defect was accompanied with a fulness of the vessels of the head, and other symptoms of constitutional derangement, which had continued to increase till this period, when I found her in the following state :—Pulse, at mid-day, rather full, and at 90 ; —tongue whitish towards the root, and thirst considerable :—but her appetite was tolerable, and bowels regular.—Urine high-coloured, with a mucous deposit, and sometimes voided with heat and difficulty. She was habitually chilly in the day-time, and her lower extremities were seldom warm ; but, in the night, little of re-action, or subsequent perspiration, was discernible.—Had considerable pain in the loins, and frequently about the spine of the ilia, as well as in the lower extremities, all of which were aggravated as the day advanced ; but, soon after retiring to rest, they generally vanished.

Often, however, on suddenly turning herself in bed, the pain in the loins was felt severely for a few moments, and which shot up towards the scapula. —Complained, also, of some weakness in the lower extremities, especially in the ancles, on long standing, accompanied with some pain. She could lie on both sides, but with more ease on the left, and on this only could she sleep.

During this short period of indisposition she had grown paler, with an evident loss of substance. Her catamenia, also, were less healthy, but more profuse, and returned every three weeks; and, in the intervals, had frequently some leucorrhœal discharge.

About a week after she first became indisposed, a respectable surgeon, in consequence of vascular congestion about the head, though unattended with pain, abstracted a pretty large quantity of blood from the temples by leeches; but, in a day or two afterwards, she was attacked with a severe pain in her forehead, particularly towards the left side; which, after continuing a week, left her, and was succeeded by vertigo, which had been so considerable subsequently, till I was consulted, as to cause her, when erect, to keep her head steady, and eyes looking in the same direction, from an apprehension either of falling down, or being sick. The circulation in the head had diminished after the pain ceased, but the action of the heart was still periodically increased.

During the time that this pain was so considerable, it extended down into the upper part of the left orbit, especially during the latter part of the day ; and, whilst she was under this influence, the pulsations of the heart and temporal arteries were more perceptible. Moreover, even during the absence of cephalalgia, she had, occasionally, slight shooting pains in this part ; and, at all times during the day, complained of a stiffness in, as she called it, or an inability to elevate, the palpebra, which she was obliged to rub with the finger every few moments when looking intently at minute objects, in order to enable her to see more clearly, and to elevate it the more freely. This want of mobility, or stiffness, she thought, extended, in a small degree, to the right upper eyelid.

On examining the eyes, the right iris was found to contract vigorously, whereas the left contracted less, and more feebly, when both were suddenly, and at the same instant, exposed to a strong light ; and, while under this exposure, for a few moments, the left pupil appeared considerably larger. There was apparent opacity of the left crystalline lens, and the sight of this eye was more defective than that of the other.

On rising in the morning, her sense of vision was moderately distinct ; but, as the day advanced, this grew less and less so, insomuch that, in the evening, she could not distinguish minute objects, even not the letters of a good-sized print ; which, she

affirmed, were all the same to her. This confusion of vision existed equally, or in a greater degree, when the right eye was covered ; but, when the left one was closed, her sight was considerably more distinct.

On looking through glasses of different magnifying powers with the left eye, her vision was very imperfect ; insomuch, that even the letters of a large type, when viewed through a double convex lens, were scarcely distinct ; and if she did not close her eye every second or two after beholding them, a mist supervened, and they appeared more confused. The focal distance necessary for effecting the greatest degree of vision was more than one half less than that which was required for the right eye. I had not the opportunity of examining the state of vision with a concave-dioptrical glass.

During the day, she frequently complained of fullness at the stomach, either attended with, or followed by, faintness ; both of which were as often relieved by a return of the stridor abdominalis, along with a beating in the abdomen, about two, or two and a half inches, from the navel, transversely to the left.

The spine, on examination, exhibited no change of structure, neither was any pain excited in any part of it, on equal or uniform pressure, excepting about the third and fourth lumbar vertebræ, which was considerable.

It now occurred to me, that in this early stage of

the complaint, and from the state of the tongue, frequent abstractions of blood from the loins might supersede the necessity of caustics, when combined with a strict adherence to the horizontal posture: consequently, eight or ten leeches were applied, and the citrate of potass, and a milk diet, were prescribed, enjoining, at the same time, the recumbent position.

Three days after the application of the leeches, four ounces of blood were abstracted from the same part, by cupping. These bleedings, and more particularly the latter, had the effect of relieving the pain in the loins; but afterwards, for the first twenty-four hours, she fancied the vertigo had increased, and her vision become more imperfect. Subsequently, however, there was considerable amendment, both in these and other respects; for, in a week from the commencement of this plan, the appetite had improved, the tongue was cleaner, the thirst had abated, and her pulse was down at 72.—The pain in the loins and vertigo were considerably diminished, and the bowels natural, but the urine was still high-coloured, though without sediment. Her sight, also, was greatly amended, and the pupils, and contraction of each iris, appeared more natural and uniform; but, as to the stridulous noise, and uneasy sensations at the stomach, there was less alteration, though they were certainly more unfrequent. This circumstance, however, and the prospect of not being able to confine her much

longer to the horizontal posture, induced me to adopt the use of caustic-issues; although I was satisfied, that the present plan, if persevered in, promised very great advantages.

Three days after the application of the caustics I found the pupils nearly equal, and a greater uniformity in the contraction of each iris, with scarcely a vestige of opacity in the left lens; and she could now read a page or two of a moderate sized print pretty well with the left eye only, but not without the aid she derived from rubbing her eyelids frequently, in order to assist the power of nictation. The vertigo, also, was further diminished, but she still had occasional returns of those disturbed actions in the arterial system. The stridor abdominalis and uneasiness at the stomach, as well as the pain in the loins, however, had not returned since the application of the caustics; and, in other respects, she appeared to be daily improving.

In addition to the above symptoms, she complained of the ascarides, that had been for a long time rather troublesome, and to which, hitherto, I had paid no attention, in order to ascertain what amendment could be effected as touching the general symptoms, whilst this source of irritation remained; for, in Brooke's case, which will be hereafter described, I was not thoroughly satisfied as to the degree of influence these vermin had on the extraordinary phenomena that attended it.

The following electuary was now ordered to be

taken night and morning, twice or three times a week, and in such doses as to open her bowels pretty freely :—

R Confectionis Sennæ unciam dimidiam,
Sulphuris Sublimati drachmas sex,
Pulveris Jalapæ recentis drachmam,
—— Potassæ Nitratis grana decem,
Syrupi Rhamni quod satis sit ut fiat electuarium.

From the motions obtained by this laxative, which never exceeded four, she was confident that both her vertigo and vision were rendered worse, at least for one day, and in the manner similar to the bleedings. Exclusively, however, of this interruption, she continued daily to recover, and, before the expiration of a month from the commencement of the above plan of treatment, and at the time of sending this work to the press, she was in the following condition ;—viz. appetite good,—complexion healthy, and she had obtained considerable substance ;—tongue clean, with seldom any thirst, or unnatural heat ;—bowels regular, with less of the stridor abdominalis ;—no pain in the loins, or elsewhere ;—vertigo trifling, with rarely any disturbance in the heart, or arteries of the head. The pupils were alike, and the contraction of each iris equal, but the left one contracted somewhat more powerfully than the right, without the least appearance of opacity in the lens ; and she could now see as well with the left as the right eye,

and could read a page of a small print very well, with a freer motion of the eyelids. The caustic-issues discharged well, though the eschars had not sloughed off.

REMARKS.

Here we have a case of dysopia, or defective vision, accompanied with symptoms of myopia, as usually denominated by nosologists, being a secondary affection, and symptomatic of disease in the loins. That this was the case, we need no greater proof than that the remedies which subdued or relieved the latter, removed the former; but to account for the manner in which the one produced the other, physiologically, is a task to which I am in nowise competent.

Did the affection at the origin of the spinal nerves, from the strong connexion these have with the third, fifth, and sixth, pairs of cephalic nerves, through the intervention or medium of the great sympathetic, sufficiently account for all these phenomena? Might not these nerves, which are distributed to the eye, and its appendages, by being thus sympathetically affected, impart some alteration to the contractile power of the recti muscles? Would not this effect be the means of changing the form or structure of the eye, by allowing, or causing, it to assume more of the elliptical form, with a consequent elongation of its axis? Would not the

crystalline lens, under these circumstances, be pushed forwards, and, by its pressure on the iris, not only dilate it, but lessen its contractility? Did not the situation of the lens account for its apparent opacity? Would not the axis of the eye, by being lengthened, increase the convexity of the cornea? These questions I submit to the consideration of the physiologist and optician.

As to the manner in which the power of sympathy could operate in producing this variety of dysopia, or defective vision of the left eye, without any very material consent of the right; and, also, how these effects should be dependent on disease existing more on the right side of the loins, (as was the case,) is not readily explained. A similar circumstance, of disease prevailing on one side of the spine, being accompanied with pain on the contrary side of the head, has been already noticed, and which some of the succeeding cases will illustrate; but instances of an analogous kind, where the cause, from being on one side of the encephalon, has produced affections in the other, have been long observed.

One circumstance, worthy of attention, is, that on first visiting this patient, the pupil of the right eye contracted with unusual vigour and rapidity; but this power seemed to lessen in proportion as it was restored to the other, insomuch that, on my last visit, the iris of the latter contracted more vigorously than that of the former. This pheno-

ménon reminds me of a case, which, among others, I published, about twenty years ago in the 25th and 26th numbers of the London Medical and Physical Journal, where, after the action of the iris of each eye had been suspended for some time, in consequence of violence inflicted on the nape of the neck, on a return of nervous energy, the contraction of each iris was unnaturally powerful for a time.—It may not be amiss to remark, that here, as well as in some of the preceding cases, when the disease was in its incipient stage, and before distortion had commenced, the stridor abdominalis was less audible and distinct.

This case also proves that the action of the heart, and arteries of the head, may not only be increased, and exist along with impaired vision, without the one being dependent on the other; but shews, from the preternatural dilatation of the pupil, and an apparent want of mobility in the iris, attended with an ostensible opacity of the lens, how a sympathetic may be mistaken for an idiopathic affection of the eye. Hence the necessity both for the oculist and general practitioner clearly to ascertain, in cases of dysopia, whether the disease be not accompanied with constitutional symptoms dependent on some affection of the spine.

SECTION II.

CASES OF SPINAL AFFECTION.

CASE XV.

IN the month of October, 1813, I visited Miss I., æt. 15, a young lady exceedingly tall, with a long spine, and full chest; the particulars of whose case, previously to my seeing her, I learnt from her friends, and the surgeon in attendance, and which are as follow.

In the beginning of December, 1812, she was seized with symptoms of catarrh, and, during its continuance, had two or three slight attacks of hæmoptysis: after these symptoms were abated, she remained in a languid state, having, occasionally, fever, till last April, when, being somewhat recruited, she took a journey to town. Some weeks after her arrival in London, she was attacked with symptoms of pneumonia and hepatitis, with great pain at the præcordia, inclining to the left side; and with dyspnœa, so great as to threaten suffocation. Her bowels were so constipated, at this time, as to resist all the endeavours of some emi-

nent practitioners in town to open them, for a fortnight, and henceforth continued most obstinately constipated. For betwixt three and four months she continued in town, exposed to frequent returns of pulmonic inflammation, or periodical asthma, as it was then supposed; and, during most of the time, her mouth was kept sore by the use of mercury.

In August she was so much reduced, that it was judged necessary for her to return into the country; after which, some very respectable practitioners were called in, who put her on a course of tonic medicines, such as Griffith's mixture, &c. occasionally interposing the most drastic purgatives, as her bowels still continued in the same torpid or inert state. She, however, experienced no relief from this plan, but evidently grew weaker, insomuch that, in a short time, her friends did not expect her surviving a week longer.

It was under these circumstances when I first saw her, and from the accurate and minute history of her case, given by her family surgeon, we agreed that there were some grounds for suspecting that the train of anomalous symptoms I am going to describe, was occasioned from distortion, and the result proved these conjectures not groundless.

She now appeared reduced to the last extremity of weakness and emaciation. Her appetite was such, that she seldom took more support than a small biscuit, and a tea-cupful of coffee or milk

a-day, for a long time previously :—her bowels were confined, insomuch that a motion was seldom obtained without the aid of some powerful purgative, which, however, often failed in its operation; unless she had been a week or ten days without a stool, which was sometimes scybalous, and of a dark leaden hue; but oftener, when semi-costive, resembling cow's dung in colour.—Her urine was not dissimilar to high-coloured brandy, with either a supernatant greasy pellicle, or a copious settlement of mucous of a lateritious tinge, and, in quantity, seldom above two or three ounces a-day. She still continued to have frequent attacks of pneumonia, which lasted only a few days, and went off by expectoration of yellow concocted mucus, returning, after an interval of a week or ten days, or sometimes, though seldom, a fortnight.

Her pulse was small, soft, and feeble, and varied from 60 to 86 in the course of the day, being governed by remission and exacerbation of fever, which returned every four or five hours. The excessive chilliness, which had affected her during her whole illness, was still present in the day-time; but, in the night, she was somewhat hot and restless, till two o'clock in the morning; after which she slept well, and perspired about her breasts and arm-pits; but the rest of her skin was usually dry, and her feet were seldom warm. Her eyes were languid and sunk within their sockets; and the tunicae albugineae were of an icteric hue. Her

tongue was also somewhat furred and yellowish, and the left margin was ulcerated ; but seldom had thirst, though, occasionally, she had a strong propensity for highly seasoned meats, particularly salted herrings,—being satisfied, however, with a very little, such as half a mouthful.

She could only lie on her back, inclining to the right side, which was a source of great distress to her ; and her weakness was such that she could not stand without the aid of two persons to support her, and complained of great weakness and torpor in the lower extremities, especially in the ancles. The pain, with soreness at the præcordia, particularly on the left side of the xiphoid cartilage, was almost constant, and generally aggravated by an erect posture. This part had been the principal seat of her distress for a long time, and for the removal of which, leeches, blisters, and an issue, had been had recourse to. She had, also, frequently colicky pains about the navel.

From the circumstance of this young lady having a very long spine, and broad chest, and from the anomalous character of her complaints, sufficient *data* were afforded for suspecting some spinal affection, as before hinted ; which, on examination, was found to be the case, as several of the dorsal vertebræ were thrown to the right side, and formed a moderately acute angle opposite the lowest point of the scapula ; the distance from which to the axis of the spine being four and a half inches ;

whereas the distance to the opposite scapula, in the same transverse direction, was only one and a half inch. This distortion caused the corresponding ribs to protrude laterally, whilst the two next vertebræ, below the curvature, seemed to project a little posteriorly.

On suspending the superincumbent weight the curvature lessened,—a circumstance that was considered favourable, particularly as she felt little pain in the part on pressure.

On attributing the proximate cause of this distortion to mechanical agency, the horizontal posture was recommended, allowing her to adopt that position in bed which was the most agreeable to her feelings; and the good effects of this plan, in a week or ten days, were clear and decided; as there was less distortion, her appetite somewhat improved, and her bowels were less torpid, consequently requiring milder purgatives; and she could lie on either side,—an acquisition very agreeable to her. These pleasing circumstances were nothing more than a prelude to a further amendment; for, at the expiration of nine weeks, (the period of her confinement to bed,) her appetite had further increased, and she had obtained strength and substance, with a considerable diminution of the distortion; there was, also, more action in the pulse, it being fuller and more frequent, and ranging from 90 to 104, or 106. Her tongue was cleaner, the secretions had augmented, and her bowels become

less inert ; as she had stools regularly, sometimes spontaneously, at other times by the aid of small doses of the sulphate of magnesia. Her motions, however, during this period, were soot-coloured, or still resembling cow's dung ; but, for five or six weeks of the latter part of it, of a natural consistence, and of such magnitude as to bear no proportion to the *ingesta*.

After three weeks' or a month's confinement to bed, she was seized with an alarming diarrhœa, preceded by some sickness and reaching, and, on examining the stools, they were found to consist, nearly altogether, of genuine bile ; the quantity of which could not be ascertained, but it was enormous. This evacuation continued little more than a day ; but, subsequently, for a twelvemonth, returned at intervals of from a fortnight to two months' duration—the discharge growing less, as these became longer. Such evacuations, however, seemed to enliven her spirits, to increase her appetite, and amend the colour of her stools ; but it was a long time before these assumed a natural aspect.

After being confined to the horizontal posture for the time already specified, she resolutely determined to sit up five or six hours in the day : hence she seemed gradually to revert to that state from which she had been so happily rescued.

She now, as a substitute for the recumbent posture, consented to the use of Eagland's spinal machine ; and, as she complained of a little pain in the

curvature, on pressure, two small caustics were applied. From this time she was indulged with sitting up daily, and gradual amendment became again discernible ; but the standard number of her pulse was, for a long time, about 95, and always varying from every slight remission and exacerbation of fever : the returns, however, of pulmonic inflammation ceased soon after the superincumbent pressure was lessened.

Soon after the full-length spinal apparatus was resorted to, she was enabled to walk short distances, which were daily extended ; and, in all other respects, she correspondingly improved : but it will be unnecessary to give any farther detail of particulars, as she continued uninterruptedly to recover, and was married in the summer of 1816. Previously, however, she laid aside her mechanical apparatus, save the body-part, which she now wears, although the deformity of the spine is nearly obliterated ; but the caustic issues are continued open, and she has also at present an issue in her side, as she is frequently attacked with some cough and pain in this part, on catching cold, which she continues subject to, from the irritable state of her lungs.

Since writing the above, this lady has become a mother,—an event which seems to have been propitious to her health, as hitherto she has had no return of her pulmonic affection. In short, her recovery appears complete.

REMARKS.

Here we have a case which affords some interest, as it shews how a train of anomalous symptoms may be induced by a derangement or suspension of the visceral functions, in consequence of distortion. That this applies to the liver is evident; and this circumstance, when combined with that torpor of the bowels, which so often accompanies distortion, sufficiently accounts for the obstinate constipation; for it seems clear, that no bile had passed into the duodenum for a long time, from the appearance of her stools; yet no symptoms of icterus were present, if we except the yellowness of the tunica conjunctiva,—for, as to her skin, it displayed no more sallowness than is often observed in spinal affection: neither could I detect bile passing off by the rest of the emunctories; but that there was an infarction of the liver admits of little doubt, yet without producing any perceptible enlargement of that viscus. The colour and magnitude of her stools, without bile, after the removal of the superincumbent pressure,—together with the periodical and profuse evacuations of that fluid, which always relieved her, and changed her intermediate stools gradually to a lighter colour,—are circumstances equally curious and novel.

This case strikingly illustrates to what an extent life may be eked out by a small quantity of nutri-

ment, as long as the secretions are correspondingly scanty, and shews the impropriety of giving purgatives under such circumstances ; for, during the time she was labouring under the full effects of distortion and want of appetite, these always weakened her, without improving the latter. Hence, in all such cases, the obvious remedy for costiveness is the removal of the superincumbent pressure ; and, moreover, the protrusion of the ribs laterally would necessarily draw along with them the liver and diaphragm ; and, thereby stretching the suspensorium, seems to account for the distressing irritation at the præcordia : a similar pain to which is often occasioned, in such cases, by the cartilages of the ribs giving way, but which did not appear to be the case here.

CASE XVI.

JAMES HIRST, a pretty stout and well-formed young man, æt. 22, was three years ago seized with sickness and cough, attended with some protuberance of the ribs, under the anterior part of the left mamma, followed by dyspnœa, and palpitation of the heart—especially on bodily exertion, or ascending a hill. Hectic fever, after some time, supervened, which gradually undermined his constitution till about twelve months ago, when his expectoration became very copious.

He had been a patient, in this interval, of several practitioners, both regular and irregular ; and, for the last twelve months, had been under the care of a respectable physician, without experiencing any relief, and never having the state of the spine examined.

When admitted a patient into the Dispensary, several of those dorsal vertebræ, which are opposite the scapula, were projected to the left side about three-quarters of an inch ; and, by pressing on the ends of the ribs, not only raised the left scapula a little, but produced an elevation of them at their connexion with the cartilages at the sternum—and, most probably, some organic derangement of the heart.

His pulse was forcible and strong, and about 80 ; and his urine was high-coloured, in small quantities, and generally deposited a sero-purulent matter : had rigors alternating with heats in the day, and succeeded by profuse night-sweats ; but had little thirst, and his appetite was tolerable. When he lay down in bed, at night, either on his back or right side, his cough was dry and incessant ; but, on turning to his left side, he would expectorate, frequently, half a porringer of pus, and then go to sleep ; and, on walking, or exerting himself, his cough was also dry and harassing ; but, on sitting down, or resting himself, he spat up large quantities of matter ; and, even sometimes in walking, in order to relieve himself by a copious expectoration,

he would throw himself down, and rest upon his knees and elbows. He complained of some pain about the sixth dorsal vertebra, on pressure,—on each side of which a caustic was applied ; and, as long as a moderate discharge was kept up, he seemed to obtain some relief. Emetics, the digitalis, and the citrate of potass, with small doses of calumba, were also prescribed. After he had continued this plan about five weeks, he obstinately persisted in drying up his issues, and refused to submit to the recumbent posture : in consequence of which he was discharged, with little hope of recovery.

REMARKS.

In this case, little doubt can be entertained that, if, at the commencement of the complaint, the proper means for arresting distortion had been had recourse to, much of the subsequent mischief in the chest would have been prevented. We are warranted in this conclusion, when we consider the patient's natural stamen, and the length of time before the lungs materially suffered. Hence the following practical hint may be deduced, and which cannot be too strongly inculcated,—namely, whenever there is dilatation of the heart, with enlargement or protuberance of the chest, it will always be advisable to examine the state of the spine.

CASE XVII.

MASTER S., æt. 6, a fine boy, with a large and perfectly ossified head, and, in other respects, well formed, excepting the joints of both extremities being somewhat larger than natural, was brought to me in the summer of 1815; and whose mother gave the following short history of his case.—About twenty weeks previous to this time, he was seized with pain in the bowels, and tenesmus, which, in a few days, were removed by some active purgatives. Eight weeks afterwards, these symptoms returned, and were succeeded, in a day or two, by pain in the occiput, and vomiting. He was then feverish, and occasionally appeared delirious, with some little strabismus. His case was declared to be hydrocephalus, and a blister was applied to the head, and mercury introduced into the system, sufficient to raise a slight ptyalism: notwithstanding, however, he continued for several weeks to exhibit signs of delirium, as it was supposed; but these were more probably the effects of misconception arising from double vision,—for, after the first week, when strabismus had disappeared, he still continued to have an unnatural rolling of the eye-balls, and often saw objects double, and ran about the room making mistakes accordingly.

As soon as these symptoms abated, he complained of great pain in the back, belly, and lower extremities, especially in the two former; and ever since, in walking, had often fallen down by one leg tripping up the other. When, however, he ran, he was less liable to this accident. In walking, he frequently lay down for a few moments, and, during the latter part of the day, would often throw himself down on the carpet, or repose his head on a chair or table for a while.

This boy, according to his mother's account, had always been tender, and subject to colds; but, in other respects, a fine healthy child before this indisposition.

He now appeared to have some fever, though his pulse was not much accelerated,—ranging from 80 to 94; yet his tongue was rather furred, and somewhat yellowish; and he was thirsty, especially during the latter part of the day: his urine was high-coloured, and he was costive.—Had rigors at mid-day, succeeded by heats in the evening, which terminated by night-sweats.

On examining the spine, the eighth and ninth dorsal vertebræ were found projecting a little posteriorly; and several of those above, inclining to the left side, occasioning, by this lateral pressure on the ends of the ribs, an elevation of them under the left mamma, and thereby a dilatation of the heart, and an increased action of the carotids.

The febrifuge medicines, so often prescribed in

the foregoing cases, were here recommended, together with caustics, and the use of Eagland's stays; but as this patient resided at a great distance, I have not yet heard of the result.

REMARKS.

This case, in reference to distortion, being similar to the last, shews, like it and many others, that these affections are not sufficiently attended to by medical men: for here, two eminent physicians, and a respectable surgeon, had been consulted; and who, from the mode of treatment adopted, and pronouncing his case hydrocephalus, must have mistaken a sympathetic for an idiopathic affection of the head,—and hence is shewn the strong affinity betwixt cerebral and spinal disease; and, in all cases where the morbid phenomena may be referred to either, how necessary it will be to examine the state of the spine.

CASE XVIII.

MASTER L., æt. 8, a fine boy, of bright intellects, and apparently in tolerable health, was seized with a fit, which, from the best information I could collect, was of the epileptic kind, though not well marked. This continued for a quarter of an hour, and was succeeded by pain in the head, languor, listlessness, and impaired appetite, with great weakness and torpor in the lower extremities, so as to incapacitate him from walking even short distances without resting. In a few days after, he had a second fit of the same description, which produced an aggravation of all these symptoms.

On his first attack, a medical gentleman was called in, who continued to administer such anti-spasmodics as are generally employed on these occasions, for some weeks, when I saw him for the first time; which was in the summer of 1815.

His pulse now ranged from 80 to 90, and was soft;—tongue slightly furred, and inclining to the yellow tinge, but had little thirst;—appetite bad;—was chilly in the day,—and had some increased heat and perspiration in the night;—bowels constive,—urine rather high-coloured, with occasional sediment.—Had frequent pain in the head, and sometimes vertigo. There was a frequent rolling

motion of the eye-balls, which displayed much languor ; as well as a slow and feeble contraction of the iris of both eyes, when suddenly exposed to the light, in which, also, he could only look at the same object for a moment or two.—Had, occasionally, pain in the back, stomach, and bowels, and complained, at the period above specified, of great weakness and torpor in the lower extremities ; and walked with difficulty.

The state of the spine appeared no wise different from the last case ; and, independently of the superincumbent pressure from a large and well-formed head, this boy had been in the habit of sitting, and inclining somewhat to the right side, at the writing-form, many hours in the day.

The citrate of potass, and cathartic mixture, as well as a dram and a half of powdered tin, to be taken every night at bed-time, were prescribed. The horizontal posture was also strictly enjoined, but little attended to.

In a few weeks he found some relief, as touching his febrile symptoms, and an increase of appetite ; but, in other respects, there was no variation, though he had no return of his fits.

A pretty large blister was now applied to the back, at the point where the spine formed an angle, and afterwards his recovery was uninterruptedly progressive in all respects, insomuch that in three weeks or a month his health appeared restored, and the spine to have nearly resumed its natural form.

REMARKS.

This case proves, and which occasionally occurs, that spinal derangement may be either ushered in by, or attended with, fits of the epileptic kind ; and, when either a defect in the lower extremities, or any other prominent symptoms, that usually accompany spinal disease, ensues to them, there will be grounds for suspecting the cause to originate in the spine. These kinds of fits are, however, seldom numerous, or well marked, often differing from the cerebral epilepsy in being less convulsive, and in producing less insensibility.

The effects from the blister are also worthy of notice, as they are so striking as to hold out the prospect of succeeding in similar cases. Indeed, generally speaking, I have thought blisters preferable to caustics in all such cases where a permanent drain is not required ; but the circumstances under which each is appropriate, have been already pointed out.

CASE XIX.

MISS S., æt. 20, of the middle size, and naturally well-formed, had, for the last two years, not only been remarkably susceptible of the cold, but subject to catarrhs, which, for the last twelve months, had been more frequent and severe, and attended often with slight attacks of pneumonic inflammation, a harassing cough, particularly in the day-time, with considerable expectoration in the morning, as well as frequent night-sweats.

For the last two months these complaints had increased so much, as to preclude her leaving her room; for, even to breathe a colder air not only produced excessive coughing, with increase of pains in the chest, and much distress to her feelings, but invariably brought on hoarseness. Ascending the stairs, or moderate bodily exertion, excited coughing, and great difficulty in breathing; but, when the body was at rest, and more especially when in bed, she experienced little trouble in these respects,—though she could not sleep comfortably when laid on her back.

At this time she often complained of pain in the dorsal vertebræ, opposite the lowest points of the two scapulæ, shooting toward the lower termination of the sternum; but oftener into the left side, about two or three inches from the xiphoid cartilage,

that was frequently severe, and for which she had occasionally been bled and blistered with no great advantage. Her pulse, which was small and contracted, ranged from 90 to 106, and her appetite was bad; but her thirst was inconsiderable, though her tongue was slightly furred, with a shade of yellowness;—her urine, also, was rather high, and in small quantities, and often deposited a mucous settlement: she likewise frequently complained of tightness at the præcordia, general languor, and weakness in the lower extremities.

On examining the spine, several of the dorsal vertebræ were found inclining to the left side, and laterally forming a small segment of a circle,—the point at the greatest distance from the axis of the spine was two-thirds of an inch, or thereabouts: and this transverse line, continued, was even with the inferior margin of each scapula, the left of which was somewhat elevated. One or two of the ribs of the same side seemed to protrude a little, and the right scapula was somewhat depressed.

It will be unnecessary to detail all the particulars respecting the treatment which had been adopted antecedently to my seeing her. Suffice it, that the citrate of potass, and small doses of the digitalis, along with some pectoral demulcent, were now prescribed with some advantage; but she experienced no material relief till she adopted the use of the body-part of the stays, before mentioned,

which she reluctantly consented to ; but, after wearing them a week, nothing could induce her to lay them aside, and from the use of which she gradually regained her former health, and the deformity, in four months, had nearly vanished.

CASE XX.

RICHARD DAWSON, æt. 33, a well-formed man, but of a scrofulous habit, was, in the winter of 1814, seized with a pain in the loins, which, after continuing a fortnight, was apparently removed by the application of a blister ; but, in a few weeks afterwards, he was attacked with another pain on the left side of the spine, a little below the scapula, which shot forwards beneath the inferior margin of the left mamma. These pains were generally worse during the latter part of the day, or on exertion, and particularly on carrying loads on his shoulder, which he was in the habit of doing.

In this state he continued till the following spring, when I first saw him, at which time he had a dry tickling cough, with obstructed respiration on ascending any easy eminence. He had, also, previously to this illness, been accustomed to lie on the left side, but now could only lie on the right, and even this position often increased his pain near the scapula.

His pulse was now soft, and from 84 to 94, and his tongue rather furred, with a yellowish tinge, but without much thirst; and his appetite was moderate. He had some rigors, and was very susceptible of the cold, but had never much increased heat or perspiration. His urine, however, was sometimes higher than natural, with a mucous deposit of a lateritious tinge, but his bowels were pretty regular.

Here the dorsal vertebræ inclined to the left side, in the same manner and degree as in the last case, but rather higher in the spine. The degree of pressure on the ends of the ribs was exemplified by an enlargement of the left mamma, from the increased convexity of the subjacent ribs,—the distance from the nipple to the sternum being three-quarters of an inch greater than on the opposite side; but there was no unnatural pulsation of the heart.

After abstracting six or seven ounces of blood from the arm, leeching, blistering, and the insertion of an issue betwixt the shoulders, he took the citrate of potass for a couple of months, without any advantage; on the contrary, his pulse had increased in this interval from 96 to 108, and seemed rather weaker.

Soon after this he was seized with an uncommon degree of torpor in the lower extremities, with an inability to walk, excepting with the aid of two sticks; complaining, at the same time, of dysury,

of some pain in the loins, and of his legs being cold, and his ancles œdematous ; and, also, of the lower part of the abdomen being considerably enlarged.

In this state he continued a few days, when the numbness left him, and was succeeded by paraplegia, and a partial incontinence of urine, i. e. sometimes making a small quantity of water,—at others, passing it involuntarily. This change, however, made no alteration in the state of his pulse ; but his legs settled, and there was some abatement of febrile heat ; though, subsequently, he had a catching, or convulsive twitching, in the lower extremities, particularly in the left leg, in bed, on an attempt to make water, and sometimes on his toes touching the ground, without treading with any other part of his foot.

On again examining the spine, a very small projection of the spinous process of the first lumbar vertebra was apparent ; but, as there was some fulness of the surrounding integuments, and some pain on pressure, it would have been difficult to ascertain whether this small enlargement were occasioned by a displaced bone, or from a thickening of the connecting ligament, if the characteristic symptoms of compression had not been present. This was the part on which the blister had been applied, and in which, ever since, he had experienced, occasionally, some little pain, but which he had not mentioned since the application


of the blister. Caustics were now applied to this part, in the usual manner, and the bark and calumba, in small doses, as well as the horizontal posture, were prescribed, together with friction to the lower extremities. In this plan he persevered for some months with advantage, by regaining the retentive power of the bladder ; but the paraplegic symptoms were not much relieved.

Soon after this, suppuration formed under the integuments, covering the diseased vertebra of the loins, as well as in other parts below, attended with large sloughings of the integuments, to which succeeded phthisis pulmonalis, that rapidly closed the scene.

REMARKS.

Cases like this, and the preceding, frequently occur in practice, consequently possess little novelty ; and many others might be adduced by way of illustrating the foregoing theory ; both of these, however, shew the necessity of lessening the superincumbent weight, and restoring the natural direction of the spine ; and the one also proves that lateral incurvation may be present in one part, while latent mischief is going on in another ; and, at the same time, the one having no apparent connexion with, or relation to, the other. Hence we may infer how necessary it is to be dissatisfied with a superficial examination in these kinds of dis-

eases ; for, had the whole spine here been accurately examined, the consequent mischief would probably have been obviated.



CASE XXI.

ON the 4th of December, 1817, I visited ——, a young lady of a sanguine temperament and sallow complexion, with a full habit, and broad chest, who complained of difficulty of respiration, especially on motion ; but very little, if at all, affected by change in the position of the body, and frequently attended with a sense of tightness across the pit of the stomach ;—a hollow dry cough attacking her by violent fits, (in the intervals of which she was but little troubled with it,) particularly on the least exertion, or lying on the left side ;—also severe pain situated about the middle of the left side of the chest, and extending to the back and shoulders, aggravated by coughing, or attempt at full inspiration ;—constant, and often acute, headach ;—frequent rigors ;—much thirst ;—great debility of the lower extremities ;—depression of spirits ;—disinclination to any exertion, and want of sleep ;—was frequently unable to articulate, but in a low whisper : all the symptoms were aggravated towards evening.—Could lie easiest upon her back, with the head and shoulders much elevated ;—

pulse 110, rather weak ;—eyes heavy, and conjunctiva slightly tinged of a yellow colour. The pupils were somewhat dilated, and each iris contracted feebly. Her vision was also weak, insomuch that she sometimes could not discriminate her friends at a short distance ; and, when she looked intently at her music, for some time, it appeared as if moving water, or waves, were before it.—Skin hot and dry ;—tongue white, somewhat furred, and inclining to a yellow hue, but moist ;—no appetite ;—restless nights ;—bowels constipated,—urine was not observed ;—catamenia *nunc fluunt*. These complaints had existed two months, and had gradually become more severe. The headach and pain of the side were sometimes relieved, for a time, by blood-letting and blistering ; but soon returned with equal, if not greater, severity.—Imputed all her sufferings to cold : had, by her own account, a similar, but more violent, attack about four years ago : aphonia, at that time, continued several weeks. Many remedies were tried, particularly phlebotomy, and the application of blisters ; the latter of which, in the course of four years, was resorted to upwards of forty times, but without producing any very beneficial effect. She was at last advised to go to Matlock, in Derbyshire : instead, however, of this proving serviceable, the symptoms, in the space of five weeks, were altered so much for the worse, as to require an immediate return.

The disease, nevertheless, after nearly twelve months' duration, gradually left her; more, apparently, from the efforts of nature than the assistance of art. Since then, she had been very susceptible of cold, and frequently subject to a peculiar short cough—like what is usually denominated stomach cough; and also thought herself much sooner fatigued, especially with walking, than formerly.

For the present affection she had been bled and blistered very often, as before stated, and taken saline and opening medicines with temporary alleviation of her sufferings. Blood drawn had no appearance of buffy coat. I prescribed a draught, with tinct. digital. m. x. to be taken three times a-day, together with a pill containing hydrarg. subm. grs. ij, pulv. antimonial. gr. 1, and a little opium;—also directed her to abstain from animal food, to avoid all kinds of fermented liquors, and to use warm clothing.

DEC. 8th.—Said she was no better,—had much pain over the left eye, and between her shoulders,—no sleep,—frequent startings,—pulse 112,—bowels confined.

I was extremely desirous, from the foregoing symptoms, to examine the spine, but no entreaties could prevail with her to suffer it; being assured her back was perfectly sound.—Omitted the former medicines, and ordered a draught, with magnes. sulphat. 3ij. three times a-day.

DEC. 22d.—Was easier, but she now complained much of weakness in the lower part of the back, and trembling of the inferior extremities,—pain of the forehead continued,—cough better,—bowels open. *Perstet in usu magnesiæ sulphatis.*

JAN. 1st. 1818.—Cough much aggravated,—tongue more loaded,—headach as before,—pulse 100,—bowels open. Having now obtained an examination of the spine, the whole of the dorsal column was found forming a small curve to the right, the greatest distance from which to the axis of the spine, transversely, was about one-third of an inch. The right scapula was triflingly elevated, and the sixth rib of the left side, at the point where it becomes cartilaginous, projected anteriorly, though in a slight degree, but this had been more considerable when the pain was worse ;—and it was in this part where she had so long, during these attacks, complained of pain. The shoulders appeared of equal height,—a circumstance that affords no proof of the absence of spinal incurvation. This derangement she now seemed to attribute to an infirm parent, who had been in the frequent habit of supporting himself, in walking, by resting his arm on her right shoulder.

She now was ordered a saline draught, with m. x. tinct. digital. twice a-day ; and strict rest in the horizontal position, on a hard mattress, was enjoined. From this period the amendment in her general health was astonishing ;—cough, headach,

&c. gradually became less severe ;—her appetite returned ;—bowels became regular, without medicine ;—countenance assumed its natural hue, and the pulse came near its usual number. Undeviating rest was persisted in till the first of February following, when she arose in perfect health.

REMARKS.

The above case, with which I was favoured by my friend, Dr. Turnbull, shews to what an extent a slight degree of lateral incurvation of the spine may be productive of a train of distressing symptoms, which no remedies, save that of lessening the superincumbent weight, are capable of removing ; and further proves how necessary it is to attend to the smallest alteration of spinal structure, when attended with symptoms of irritation in the chest.

I had the pleasure of witnessing the recovery of this young lady, which was as speedy as in any case I ever saw, under like circumstances ; and I have little doubt of the cure proving permanent from the use of Eagland's stays, which have been prescribed.

CASE XXII.

EARLY in the spring of 1816, a girl, not quite fourteen years of age, and who had not menstruated, applied for the cure of a cough, dyspnœa, and pain in the right side,—symptoms with which she had been troubled for several months, and which latterly had been aggravated, along with palpitation or dilatation of the heart. She had little exspuition, and this was light, or frothy, though several times it had been mixed with blood.

Her pulse was at 100, but not hard, and her tongue was rather furred, and inclined to a yellow cast, with some thirst ;—bowels costive, and urine high-coloured.—Had excessive chilliness, or slight and constant rigors, in the day-time ; with heat and occasional perspirations in the night ; and could only rest on her back inclining to the right side.

She now walked with difficulty, and appeared reduced in strength and substance ; and, for the last eighteen months, had gradually become more sallow, and thinner, and inclined to the left side ; and also experienced great weakness, especially in the lower extremities. She had been harshly treated, and often compelled either to labour, or take more bodily exercise than her strength was equal to, from a supposition that her complaints were feigned.

On suspecting some spinal derangement, I requested an examination, which was consented to, on condition that it was postponed till her next visit. In the interim, I recommended the recumbent posture, or that position in bed which was the most agreeable ; but this advice she did not strictly follow. An emetic, the citrate of potass, and pectoral demulcents, were prescribed, together with leeches, and a blister to the side ; but, notwithstanding, from the exertion of walking a mile to my house, and returning home, she grew much worse ; insomuch that in a few days her breathing was further obstructed, and her legs much swollen ; both of these symptoms were, however, relieved by two-thirds of a grain of the powdered digitalis, combined with a dram of the supertartrate of potass, three times a-day, for several weeks, varying the doses occasionally.

Six weeks after I first saw this patient, I was requested to visit her, whom I found in bed, and in that position she had been long partial to. Her pulse was small, and somewhat hard and irregular, at 122,—tongue more furred, and yellowish,—thirst considerable, and her breathing quick, short, and panting, and her cough, also, almost incessant, but with little or no expectoration, or pain in any part. Her bowels were still costive, when not excited by aperients, and her urine was higher coloured, and rather scanty, though the swelling in the lower extremities had disappeared. She

had an inappetence for food, and on the day of my visit had betrayed some signs of partial delirium.

On now examining the spine, the fourth and fifth dorsal vertebræ were found distorted to the right side, and forming an acute angle, the projecting point being nearly two inches distant from the axis of the spine; but the adjoining vertebræ were not much displaced. The pressure on the ends of the corresponding ribs was such as to cause them to protuberate laterally and anteriorly, where they became cartilaginous.

The diastole of the heart was preternaturally increased, and hurried; and more distinctly to be felt on the right side of the sternum, and that in different positions in which she was examined.

REMARKS.

This case tends to exemplify that part of the foregoing theory which relates to the dislocation of the heart occasioned by distortion; and every practitioner, who meets with this circumstance, will do well to examine the state of the spine; as I am fully persuaded that a great majority of these cases, where the heart is removed from its natural situation, are dependent on an altered structure of that column.

Had the cause of this poor creature's sufferings been discovered at an early period, there is the greatest probability that the event would have been different.

This omission we must lament the more, as the sufferings were aggravated from the mistaken idea of her friends ; and I am sorry to say, further, that I have known, in a few instances, medical men treat, with too much levity or indifference, complaints of this description, when unacquainted with the cause which has stamped an impression on the minds of the relatives or friends of the unhappy sufferer, not favourable to the latter.

CASE XXIII.

Miss H., æt. 17, and rather of a low stature, and of a stunted appearance, had for the last three years been troubled with dyspnœa, and cough, which had always been aggravated in winter, insomuch as to assume an asthmatic character, but which had generally been relieved by expectoration, that was more copious than in the summer season.

Nine months before I visited her, being early in the year 1814, she menstruated for the first time, and had continued regular ever since, without, as she supposed, having derived any advantage from it. She had seldom any pain in any part of the thorax, excepting occasionally in the right pectoral muscle, which was dull or obtuse, but her principal complaints were a fastness or tightness at the breast, and a difficulty in breathing, on ascending

a hill, or making bodily exertion, with pain in her knees. Her appetite was defective, though variable, and she was often feverish from catching cold, to which she was no less liable than sensible of it, as she complained of habitual chilliness in the day-time, as well as of constant coldness of the lower extremities, especially in the winter season.

Her pulse was small, and varied from 90 to 104, and her tongue was slightly furred,—but she was without much thirst. Her urine was small in quantity, and sometimes high-coloured, with settlement ; at other times pale and more copious, without deposit.

Seven or eight of the superior dorsal vertebræ were thrown to the right side, forming a curve, the middle part of which was one inch, or better, distant from its natural situation. The scapula was some little elevated, but the ribs protuberated the most under the right mamma, so as to increase it to nearly double its natural size. The neck appeared short, and the shoulders somewhat elevated.

Emetics, pectoral demulcents, digitalis, and squills, with a perpetual blister betwixt her shoulders, were prescribed, with sometimes the citrate of potass for the first six weeks, but with little advantage. Caustic-issues, however, between the shoulders, afforded her cough and breathing some relief ; but the most efficient advantage, for all her complaints, was obtained from the use of the suspensory stays.

REMARKS.

This case, though possessing little novelty or interest, affords one circumstance deserving of attention, namely, the enlarged mamma, which had been considered as diseased ; and so impressed was this young woman, and her friends, with this idea, that they considered her other complaints as secondary to it ; and, in two other cases of enlarged mamma, from the same cause, I have known the same mistake to have been committed, and where leeching and blistering were had recourse to for a long time with little effect : but it will sometimes happen that this enlargement is more particularly confined to the upper part of the breast, with a protrusion of several of the cartilages above it, and which is attended with pain and even soreness to the touch, occasioned, probably, from the stretching of the superadjacent covering. Under such circumstances, also, I have known leeching and blistering employed ; and, in one instance, for more than twelve months, but with little advantage, save that of palliating or abating the irritation for a short time.

A tailor, thirty years of age, whose case I may mention here, and which may be condensed into a few lines, from the resemblance it bore to the last one, particularly as to the state of the spine,—with this exception, however, that, instead of febrile, he had dyspeptic symptoms, and that two of the cer-

vical vertebræ were involved in the curve, which was to the right side, and, though of equal length, formed a rather smaller segment of a circle. This derangement protruded the right mamma, under which was frequently a dull pain that passed down into the biceps muscle of the corresponding arm, accompanied with an unpleasant sensation of inordinate heat in the fore-arm. These symptoms had troubled him above two years, and for which he had consulted several practitioners, without ever obtaining the least relief; and, as he now refused to adopt the use of any mechanical apparatus, I recommended him to sew with his left hand, and have not heard of him since.

A great majority of the cases of this species of lateral displacement of the vertebral column, where the patient suffers much from chronic pains in different parts of the thorax, is generally from twenty to thirty or thirty-five years of age; and I would advise the practitioner, when he meets with sub-acute pains in these parts, that have been of some duration, to weigh well in his mind whether they may not be connected with other symptoms attendant on spinal derangement, before he has recourse to active remedies; and, if he should commit himself by adopting such a plan, before he perseveres in it, an examination of the spine may be advisable.

CASE XXIV.

Miss A. S., æt. 30, of the middle size, but of a delicate form, had been for between two and three years subject to frequent colds. A year and a half before I saw her, she had a slight phlegmonous inflammation in the integuments, a little above the right mamma, which was resolved by the antiphlogistic plan. Four months afterwards it returned and suppurated, exactly at the margin of the mamma, and, for several months subsequently, she seemed to enjoy better health, till she was attacked with pneumonia; from which, also, in about three weeks, she recovered, but had not since regained her former strength.

In this state she arrived in town, but soon afterwards was seized with a severe catarrhal fever, with hoarseness, &c. of which she was shortly relieved; but a new train of symptoms supervened, such as giddiness or swimming in the head, as she termed it, as if intoxicated, and generally preceded by, or attended with, a sinking at the præcordia, and extreme weakness in the legs and knees, so as to be apprehensive of falling, especially when walking in the street. On bodily exertion, or even sitting up for an hour or two, she fainted; and, when dining, on using her knife and fork, she experienced great weakness in her upper extremities, which

caused her to faint, and to lie down on the sofa, which relieved this, as well as the other unpleasant symptoms. Her thirst at this time was inconsiderable ; but she had frequent darting pains across the chest, a little above the mammæ. Her bowels were constipated, which was attributed to a defective secretion of bile ; to obviate which, mercurial purges, and some stomachic tonic, were administered, but which she imagined did her harm. It was now concluded, by her medical attendant, that her complaints were occasioned by the London air, and he advised her, accordingly, to return into Yorkshire.

A fortnight after her arrival I saw her, and, in addition to those complaints already stated, she had begun to have an increase of pain, heat, and oppression, at her breast ; and fulness at the stomach, with a frequent tightness at the præcordia, as if girded, and an occasional disposition to vomit.

She now could bear scarcely any exertion, without either fainting, or palpitation of the heart, with increased action of the arteries of the head, producing heat, and suffusion of the face,—together with pain, which shot up behind both ears towards the crown of the head.

Her feelings by this time had convinced her of the necessity of adopting the recumbent posture ; after the use of which, her bowels were more regular,—for, previously for a fortnight, diarrhœa and costiveness had alternated.

On examination of the spine, the whole of the dorsal vertebræ assumed the sigmoid figure, which protruded the ribs anteriorly on the left side of the sternum, both above and subjacent to the mamma, as well as the ribs posteriorly on the right side, and which also protuberated the scapula, and removed it to a considerable distance from the spine. These displacements of the ribs gave the thorax more of the rhomboidal shape. Her pulse now ranged from 104 to 115, and was soft and rather contracted;—her tongue, also, was furred, and of a dingy yellow colour, with some thirst;—her appetite was bad, and she complained of much chilliness and rigors during the day, and of heat, and, frequently, of profuse perspirations in the night. Her urine was often high-coloured, with, occasionally, a mucous deposit, though sometimes natural.

After being five weeks confined to bed, her febrile symptoms were relieved, but she could not bear the erect posture an hour without fainting. During this period she took an emetic, and the citrate of potass, with some advantage, and, at the expiration of which, she adopted the use of Eagland's stays, and henceforth continued progressively to recover.

CASE XXV.

JOSEPH LIVERSAGE, æt. 27, a well-formed man, but of a scrofulous habit, was, in the autumn of 1813, attacked with symptoms of fever, for which, after continuing a month, I visited him for the first time, and found him complaining of excessive chilliness, and slight, but frequent, rigors, alternating with some heat. His pulse was soft and rather small, and upwards of a hundred ;—he had, also, some thirst, with a curiously-furred tongue ; as it was covered with innumerable small white papillæ, thickly set, and approaching to a yellowish hue, marked by an interstitial space of half a line distance. His urine was somewhat high-coloured, —his bowels constipated, and he had some nausea ; —had, also, frequent head-ach, with flying pains about the abdomen and loins.

From the use of emetics, cooling aperients, and the citrate of potass, in a month he had obtained some relief ; as his pulse had got down to betwixt 80 and 90, and his thirst had diminished ; but there was no alteration in the appearance of his tongue.

In this state he continued, with no great variation, for the ensuing twelve months ; his pulse often varying, but seldom below 80, or above 100, and soft, and somewhat contracted ; but his tongue, in

this interval, was never clean. His bowels were still constipated, but there seemed to be no great defect in the biliary secretion, though his stools occasionally appeared darker than natural, and, in a few instances, ash-coloured. He took tolerably of nutriment, and had little thirst; but the excessive chilliness in the day-time continued, with less corresponding heat, though frequently he had partial night-sweats.

After two months from his first attack, he began to have an increase of pain in the epigastric, and upper part of the umbilical regions, especially of the recti muscles, with a slight discoloration, and soreness to the touch, which baffled all attempts, for many months, to subdue them. He had, also, a troublesome pain, occasionally, in the right hypogastrium, and the whole abdomen was considerably enlarged; but his urine was in moderate quantity, and *now* of the marigold hue, and, on standing, displayed a supernatant greasy pellicle, or occasionally, though seldom, a slight mucous and lateritious settlement. The tunica conjunctiva exhibited a slight shade of yellowness. Sometimes he had a cough, with expectoration, for a few weeks; at other times a gentle ptyalism, or an increased discharge from the salivary glands. He could sleep when lying on either side, but not quite so well on his back; and he was much disposed to lie in bed, as he found himself the easiest, and most comfortable, in this position. He com-

plained of weakness, particularly in the lower extremities, on loco-motive exercise, and was listless and hypochondriacal ; and by some was considered maniacal : but the parish officers, on whom he had now become an encumbrance, were less charitable, and construed his complaints into idleness,—and who would, if the writer had not interfered, have taken him before a magistrate for the purpose of committing him to the House of Correction.

Notwithstanding the exhibition of several emetics, and the repeated application of leeches and blisters to different parts of the abdomen, especially to the epigastrium, with the long-continued use of a seton, together with the citrate of potass, antimonials, and saturating the system for many weeks with mercury, he found no relief ; but on the contrary, rather grew weaker, and, before the expiration of the term above mentioned, he was more listless, and had a greater aversion to loco-motive exercise ; and began to acknowledge having some little fixed pain in the back, which had hitherto been occasional and transient. On questioning him on this subject, he said that five years before, in mowing some strong grass, he sprained his loins, and from that time had occasionally felt some little pain in the part, either on lifting heavy weights, or on catching cold, but which he considered of no consequence.

On examining the spine, there appeared no fullness or protuberance to the eye or touch : but he

complained of pain on pressing on each side of the spinous process of the eleventh dorsal vertebra, though in no other part of the spine.

Two large caustic-issues were now formed on each side of the spine, as near the seat of the pain as possible ; and, from the time they began to discharge, he may date the commencement of his recovery.—The citrate of potass, hitherto taken with so little advantage, was also ordered to be continued. His amendment now was such, that, by persevering ten weeks in this plan, his health was completely re-established.

CASE XXVI.

WILLIAM HAIGH, æt. 42, a well-formed man, but of a scrofulous habit, and a clothier by trade, informed me, that towards the latter end of September 1813, he first felt a troublesome pain at the pit of his stomach and left side, under the false ribs ; the former often communicating transversely with a pain in the spine, attended with a sense of tightness and uneasiness at the præcordia, with frequent eructations, and an impaired appetite.—Three days after this attack, he was seized with a distressing pain of the head, confining itself to the right side, but principally above the eye, and passing along the superciliary ridge to the com-

mencement of the left frontal sinus, and which sometimes accompanied, and at other times alternated, with pain behind the right ear, which occupied a part of the occiput.

He continued in this state till the beginning of December following, when he was seized with a very severe rigor, which continued, he thought, about a couple of hours. This commenced at nine o'clock in the morning, and was succeeded by a profuse perspiration, which continued throughout the rest of the day ; and, subsequently, returned daily at pretty regular periods, but without being preceded by rigors, and nearly of the same degree and duration, for four months. During all this time he suffered an aggravation of the pain in the head, and the profuse perspirations, and defective appetite, considerably reduced him. Whether these cutaneous evacuations diminished spontaneously, or by the aid of medicine, I am not competent to say ; but, some weeks after they abated, I was consulted by the patient, whose situation was as follows :—

His pulse at mid-day was from 80 to 84, and, from the account of his apothecary, had varied little from this number since his first attack ; and his tongue also continued in the same state, being a good deal furred, and of a dingy yellow or brownish aspect in the middle, but he had seldom any thirst. He experienced much chilliness in the day-time, and perspired yet some little in the night. His appetite was very defective, and he still com-

plained of great uneasiness, and a sense of tightness at the præcordia ; and of great flatulence and eructations, as well as of the same pains in the neighbouring parts, as already described, together with soreness, and some discoloration of the integuments of the epigastrium, as in the last case, and for the removal of which, leeches, blisters, and a seton, had been employed for a considerable time, but with no great effect, though he thought the seton was of some advantage. His urine was often scanty and somewhat high-coloured, depositing the same kind of mucous settlement, so often described in such cases ; sometimes, however, it was paler, when in large quantity, and without deposit. His bowels were costive, and stools sometimes dark-coloured,—a circumstance which, when taken in conjunction with a shade of yellowness in the tunica conjunctiva, shews some interruption in the hepatic functions. The cephalæa, also, continued as distressing as ever ; and, when it somewhat abated, it left a deafness in the right ear, and a dimness in the right eye, for a while, as well as vertigo, as if intoxicated.

On examining the spine, and pressing on each side of the dorsal vertebræ, he complained in such a manner as to satisfy me that there was disease in the part, to which caustic-issues were now applied, and the citrate of potass, and gentle laxatives were prescribed ; and, in a short time, signs of amendment were apparent, particularly in regard to his tongue

and appetite : the former gradually becoming cleaner, and the latter somewhat improved. The pains also in the trunk, already mentioned, together with the soreness in the epigastrium, were considerably relieved ; and his pulse now, which had acquired strength and fulness, was at 65 ; but, notwithstanding these symptoms of amendment, in other respects, for the first six months, he gained little ground, particularly as to the tightness at the præcordia, flatulence, and head-ach ; and, during this period, he occasionally took the blue pill, calumba, and small doses of ipecacuanha, in addition to the citrate of potass : but this last he always found the greatest relief from, as long as his tongue continued furred, and his urine high-coloured. Henceforth, from this period of six months, he continued gradually, though slowly, to recover ; and was under medical treatment for between two and three years,—at the expiration of which time, however, he had regained his health and strength, though the pain in his head had not quite left him ; in consequence of which, I urged the necessity of continuing his issues open for a considerable time to come.

In October, 1817, I again saw this patient, and found him *in statu quo*. He informed me, that, in consequence of not being quite rid of his complaints, he had applied to several other practitioners, all of whom, it appeared, had administered tonics. One physician, of some eminence,

had prescribed bark and calomel, to the use of which, however, hæmatemesis soon succeeded ; but on resuming, and continuing, the citrate of potass, he had no farther attack of it. He was confident that this medicine, and the caustic-issues, afforded him the most relief, especially as long as the latter discharged well.

CASE XXVII.

JOSEPH BROOKE, æt. 53, a thin spare man, of a pale complexion, and delicate constitution, was admitted at the Dispensary in the beginning of October 1815, and who deposed, that seven years before, on lifting a bed, he perceived some pain in his groin, which he occasionally felt for two years afterwards. At the end of this period he was attacked with a severe paroxysm of pain in the upper part of the right thigh, which shot upwards into his members, and thence into the abdomen ; and which had returned at uncertain periods ever since. Sometimes, at the first, it returned every fortnight, but oftener every week ; afterwards twice or three times a-week ; and more latterly, once or twice a-day ; but, for the last two months, had still increased both in frequency and violence. This pain always attacked him suddenly, and often when exposed to the cold, and was sometimes preceded by a pricking sensation at the anus, and

would continue five or ten minutes most excruciating ; insomuch as to cause him to shriek out dreadfully, and to be convulsed. After this duration, it suddenly ceased, leaving the same sensation at the anus which preceded it, as well as some pain and numbness in the calf of the leg of the same side, for a short time. The part of the thigh affected was not sore to the touch, but, after the paroxysm ceased, a degree of aching was felt in it for half an hour, (attended with general languor and lowness of spirits ;) and which, in the intervals, was remarkably susceptible of cold. When he inclined his body forwards, and put his arms under his hams, so as to grasp his knees tightly, the pain would often either leave him, or be mitigated ; and this expedient he frequently had recourse to, by sitting down on the ground, when he was apprehensive of an attack.

Contemporaneously with this extraordinary seizure, he perceived some pain in the back, situated between the tenth and eleventh dorsal vertebræ, and principally on the right side, which had occasionally troubled him ever since, and was now considerable on pressure, as well as on rising up, after his body had been some time in an inclined position ; and also on suddenly turning himself in bed, though he could sleep in any posture. He had some weakness in the lower extremities, that was increased much from long standing, and which often brought on the attack of pain in his thigh, as well

as in his back. His appetite was defective, particularly in the morning at breakfast ; but, at eleven o'clock, had a gnawing at the pit of his stomach, with a craving for food ; but at any other hour of the day was indifferent to it. He complained of frequent itching about the fundament, and sometimes voided ascarides.

Frequent rigors, or a constant sense of chilliness, were prevalent in the day-time, succeeded by nocturnal heat and perspirations ; the last, however, for the preceding twelve months, had gradually diminished ; and at this time were inconsiderable. His urine was sometimes rather high and yellowish, and voided with pain and heat ; at other times pale, and made without any uneasiness. His pulse averaged 90,—was soft, and somewhat contracted ;—and his tongue was rather furred and yellowish, but had little thirst ; and his bowels were seldom constipated. Some cough and dyspnœa, with mucous expectoration, were present, particularly on exertion, or ascending steep places. He had frequently pain along the course of the coronal suture, or over both eyes, for several hours ; and suspected the pain in his back to have been occasioned by weaving at the broad-loom, or from spinning the jenny.

The part of the thigh, where he felt this excruciating pain, was three inches below Peupart's ligament, and an inch externally from the course of the right crural artery. At this point were situated

two small subcutaneous tumours or nodules, about the size and form of a moderate garden-pea, half an inch asunder, and rather sore to the touch, but not discoloured, and moveable under the cutis. These paroxysms of pain were mostly ushered in by an attempt or two to go to stool, and the same inclination returned after the former ceased.

A caustic was applied to each side of the affected part of the spine, and the citrate of potass, during the day, and an opening electuary,* to be taken at bed-time, three times a-week, in order to keep his body soluble, were ordered him. In the first week after commencing this plan, he had only two slight fits of pain in the thigh; after which they ceased entirely. The pain, also, in the back vanished on the application of the caustics; and, in all other respects, he daily improved in health;—the tumours in the thigh also disappeared in ten days.—The progress of his recovery was such, that he was discharged at the expiration of six weeks from his admission, free from all complaints; and with a strong recommendation to keep his issues open for several months afterwards. Twelve months subsequently he continued in good health.

* R \acute{x} . Confectionis Sennæ,
Sulphuris Sublimati, ā 3v.
Jalapæ recent. Pulveris, 3j.
Potassæ Nitratis, gr. x.
Syrupi Rhamni, q. s. ut fiat electuarium.

REMARKS.

The three preceding cases illustrate the chronic and insidious nature of spinal disease, and its extraordinary sympathies ; and how, from the prominent or active character of the one, the other may be overlooked or kept out of sight. They also exemplify the specific effects of caustic-issues, when applied to the seat of the former, after all other remedies had failed ; and the inutility of local applications to the latter, in subduing the parent disease ; for, although in Haigh's case the relief was tedious and long protracted, yet, previously, he had found none,—though, in other respects, he had not been improperly treated,—till after the application of the caustics, when he slowly recovered ; and the cephalæa, which proved so obstinate, at length abated. I have frequently observed in spinal cases, when this symptom has been severe, and more especially when confined to one side of the head, which has often been the right, that the complaint has proved obstinate.

In Brooke's case, the extraordinary affection of the thigh may, perhaps, have been aggravated by the circumstance of ascarides ; for every man of experience must have seen many anomalous symptoms produced by these vermin ; but on weighing all the circumstances of the case, we are justified in concluding the efficient cause to have been in

the spine ; for, during the period of his indisposition, he had been under the care of many practitioners, and some of whom, from their manner of treatment, seem to have had an eye to this cause ; but from no remedies, either internal or external, such as blisters, &c. to the thigh, did he find the least relief.

In addition to this case, which proves, that these kind of sympathies are not exclusively confined to the abdomen, I may not inappositely here relate, in few words, the case of a woman, *æt.* 30, of a scrofulous diathesis, who was admitted at the Dispensary two months after her delivery, with most of the symptoms that indicated disease in the sacrum ;—such as a soft pulse, at 106,—a yellowish and furred tongue, with some thirst,—habitual, though slight, rigors in the day, followed by nocturnal heat and perspirations,—bowels costive,—urine somewhat high, often hot, scanty, and made with some difficulty, with frequent deposit ;—together with these, there was pain in the upper part of the sacrum, which was augmented by pressure, or by an increase of superincumbent weight.

In the first week of her confinement, an oval patch of erythematous inflammation was discovered on the inside of the right leg, which had continued ever since, being extremely painful and sore to the touch, insomuch as scarcely to bear the slightest pressure. This was situated four inches above the

internal malleolus, circumscribed, and occupied the space of about two half-crown pieces. For these complaints her medical attendant had employed various remedies, both internally, and externally to the leg, without effect. On her admission, a blister was applied over the affected part of the leg, which evidently relieved it; but she objected to the application of caustics to the loins, consequently was discharged. Five years previous to her last confinement, (having had other two children in this interval,) on romping or playing, she had the misfortune to fall with her back against the corner of a chair, at the same time having the weight of another person on her. The effects of this injury she subsequently felt, by frequent returns or exacerbations of pain in the injured part, and for which she as often had recourse to plasters, &c. or medical aid.

CASE XXVIII.

MASTER R., aged nearly 15 years, and a well-formed boy, but rather delicate, had for the last six months gradually lost his complexion and appetite, and consequently grown thinner. During this period he had frequently complained of obstinate constipation of the bowels, insomuch as to be without a motion for a week or ten days, unless he had

frequent recourse to some drastic purgative. He was listless, stupid, and inert; and, on locomotion, found great weakness in the lower extremities; and also complained of great chilliness, or an extreme sense of cold in the day, and in the night of some heat, but had no thirst. I saw him for the first time on the 1st of May, 1815, and found him complaining of pain and soreness, with some degree of tension, in the anterior part of the right hypochondrium, and in the right side of the epigastrium, insomuch as scarcely to bear the slightest touch. His pulse was soft, somewhat full, and no more than 84, and his tongue rather furred.—Urine somewhat high-coloured in the morning, but natural the rest of the day. Had also frequent nausea and sickness, with occasional vomiting; and, the day after my visit, he was attacked with inflammation in his great toe, which, however, vanished in a few days.

By the administration of two emetics, the nausea and disposition to vomit were removed; after which, seven grains of scammony were prescribed, in the form of a bolus, at bed-time, twice or three times a-week; and the following morning, three large table-spoonfuls of the infusion of senna along with a dram of the sulphate of magnesia; all of which were no more than sufficient to keep his bowels gently open. These, with the citrate of potass given in the intervals, and a blister applied to

the abdomen, soon removed the pain and soreness of it.

A fortnight after my visit, his parents were greatly alarmed from his being seized with several fainting fits (as I was informed, but which I suspected were of the epileptic kind); three hours after which, I found his pulse soft, and at 62, and his tongue cleaner, and without thirst. The irritation in the abdominal covering had not returned; but he had pains in the lower part of the thighs, on walking, as well as in the calf of the right leg, together with increased weakness. He complained of much pain in the forehead, a little above the eyes, in the day-time; and even in the night, if he omitted lying high with his head. There was little mobility in the iris of each eye; and on looking stedfastly, for three or four seconds, at any object, his eyes were painful and watery. This was more particularly the case on reading, especially by candle-light; for, after looking two or three seconds on the print, the letters appeared so confused as to disable him from discriminating them one from another. Slight spasmodic twitchings were also occasionally felt in the night when in bed, but seldom at any other time. In all other respects he appeared as described on my first visit.

On examination, I could not clearly ascertain the presence of a slight degree of distortion of the tenth dorsal vertebra; there was, however, some eleva-

tion of the integuments, and sufficient pain, on pressure, to convince me of the existence of disease. Caustics were now applied, and his medicines repeated ; but, in a few weeks, laxatives were less necessary, as he spontaneously had a motion daily, or every other day. For the first two months after this plan was adopted, he was sensible of little amendment ; on the contrary, his parents fancied the caustics had weakened him : subsequently, however, from this time, he acquired some increase of appetite and strength ; but all the morbid symptoms gave way slowly, more especially the head-ach, and affection of the eyes.

In three weeks after the application of the caustics, his pulse was at 90, and soft, though attended with still fewer symptoms of pyrexia ; and in three weeks more, at 96 : soon after this, however, it began to descend, as in three weeks further it was again at 90.

Fifteen months after his first attack, I saw this patient, who appeared in good health. He informed me that he still kept his caustic-issues open.

CASE XXIX.

RICHARD SYKES, æt. 20, of a scrofulous habit, but well formed, and by occupation a clothier, applied in the winter of 1815, and said, that, for the last two years, his employment had consisted chiefly of wheeling wet wool in a hand-barrow up a very steep hill from the dye-house ; and, for the last six or eight months, when at this hard work, he had felt a severe pain in his back, about the ninth or tenth dorsal vertebra, which passed into both sides, and to the stomach, insomuch as to produce sickness. During this latter period his appetite had failed him ; and, from the account given by his medical attendant, he had been labouring under fever for some time past, and had gradually both lost flesh, and grown weaker.

His pulse now was soft, and at 106, and his tongue a good deal furred and yellowish, with some thirst. He was excessively chilly in the day-time, without much increased heat ; but, on moderate exertion, perspired much from weakness, as well as sometimes in bed. His urine was somewhat high, with occasionally a mucous settlement of a lateritious tinge ; and he complained of great weakness in the lower extremities, especially on walking, or on long standing. His bowels were costive, and his stools sometimes of a cineritious cast ; and he rested very

indifferently in the night, but was strongly disposed to slumber in the latter part of the day. He often complained of great pain in the forehead, which was always the worst on waking in the morning, and, after continuing an hour or two, would gradually abate.

The pain in the spine was mostly aggravated in an afternoon, at two o'clock, and passed round him in the direction of the diaphragm, and down into the epigastric region ; but at the same hour in the morning it abated. From this pain, either in the back or belly, he often found relief when he pressed the part against some hard body.

On examining the spine, he complained of great pain about the ninth and tenth dorsal vertebræ.—Caustics were now applied, and the citrate of potass, and cathartic mixture, prescribed ; and hence he gradually recovered, insomuch that in six months he was considered in moderate health : his pulse, however, was at 90, and his tongue not quite clean ; but he had no thirst, and his urine was natural,—his bowels regular,—and his appetite moderate ;—he was also without pain, except some little still in his head ; in short, he had regained a very considerable portion of substance and strength ; and in this state he repaired to the sea-coast for the purpose of bathing, where he continued a month or five weeks, and returned in good health, which he has enjoyed ever since.

CASE XXX.

MASTER R., aged four months, and apparently a healthy and lively child, but of a fretful disposition, was, in the summer of 1816, attacked with more frequent fits of crying than usual, particularly in the night. These were attributed to a disordered state of the bowels and digestive organs, but which seemed, for a few weeks, to admit of some relief from the use of emetics and calomel. At the expiration, however, of this period, it was observed, that in addition to these fits of crying, when he awoke from sleep, there was an evident sense of suffocation for a moment ; but, as soon as he cried freely, this affection disappeared.

After continuing in this state, with little variation, for two months, the complaint began to assume a more aggravated character ; for now, inspiration was not only further impeded for six or eight seconds, but attended with a squeaking or stridulous noise, which sometimes resembled the crowing of a cock, and which always terminated by crying. The attacks, which at first were principally confined to the time of awaking, were soon observed to be more frequent, by returning in the intervals of sleep ; notwithstanding, all the secretions proceeded naturally, and the child gained flesh.

Hence, for several weeks, little alteration was apparent ; till at length a new symptom supervened, namely, a convulsive affection of the hands. The thumb was now drawn into the palm of the hand, whilst the fingers were stiff and extended, or, rather, reflected or thrown somewhat backwards. This symptom, after continuing a few days, abated ; but soon after returned, along with convulsions of a more general and violent character ; which occurred for a month, once a-week, at certain periods ; but, afterwards, were more frequent, so as to come on twice or three times a-week, for a short time ;—and soon after, even daily, or twice a-day, for ten weeks or three months. These were preceded by the above train of symptoms, which terminated by a strong expiration and crying for a few moments ; but, instantly after, the child stared, as if frightened at something ; the pupils became dilated, and, in a few moments, the eye-balls became somewhat distorted and fixed, the head and shoulders thrown back, his face purplish or blue, and the whole body stiff, and on the stretch, and respiration suspended ; but in a short time the spasm abated, with a free expiration : the face now became paler, he mourned for a while, and afterwards fell asleep. Notwithstanding the general spasm thus ceased, yet it was often observed, in the intervals of these attacks, that the thumb was still drawn or inflected into the palm of the hand.

These formidable symptoms supervening to those

already stated, and continuing for such a length of time, now created great alarm and anxiety for the safety of the child.

Emetics, calomel combined with jalap, opiates and other antispasmodics, were administered with no advantage. Calomel alone, however, when given in doses of three or four grains, twice a-day, for two or three days in succession, seemed the only remedy that had any effect; therefore all others were laid aside.

In this state was the little sufferer when I again visited him, and, for the first time, had an opportunity of clearly inspecting the state of his tongue, which, at the root, was furred for the space of half a sixpence, and of the lemon-coloured hue. This appearance, and the circumstance of the child not using his legs as much as was expected, induced me to suspect some spinal disease; and, on repeated examinations, I found, on pressing on the third or fourth dorsal vertebra, that he always cringed and cried; but there was neither deformity nor any discoloration of the skin.

The medical gentlemen, now present, were immediately satisfied of the existence of irritation in the part; and, in addition to the calomel purges, four leeches, at the suggestion of Dr. Turnbull, were applied to the part; which, in the language of Mr. Robinson, (a surgeon in this town, and father to the patient, and to whom I am under obligation for some of these particulars,) “acted as a

charm ;" as he never afterwards had any return of the fits, except a slight one, a few hours after the application of the leeches. In two days this remedy was again resorted to, and henceforth the child has continued free from complaints to the present time, at which he is eighteen months old ; excepting, about two months after the cessation of the fits, some constitutional irritation arising from teething, of which nothing had appeared during his illness, although his father had lanced his gums several times, with a view of obviating increased irritation,—but not for some weeks previous to the application of the leeches.

During this long period of indisposition, the child often appeared flushed and feverish, and perspired freely both night and day, on awaking from sleep, especially about his head and breast ; and, notwithstanding there were no decided symptoms of dentition, his stools were always of a green colour, and appeared to be voided with great pain, and more particularly in the middle and latter stages of the disease, as the child always cried violently on every effort to void his stools ; and nearly in the same degree in any position in which he was placed. These dejections, and the aliment taken, seemed to have no effect in accelerating a return of the fits ; neither did any evacuations appear to be the consequence of the latter, excepting towards their termination, when they were succeeded by several copious motions.

It must now occur to the reader, that this is a case of those peculiar convulsions so accurately described by the late Dr. Clarke in his Treatise on the Diseases of Children ; and erroneously denominated, by some, the chronic croup, and which this author attributes, as well as all other convulsive affections, to some organic disease of the brain, either directly or indirectly. This case, however, cannot be referred to this source, as the proximate cause appears indisputably to have been in the spine ; for here it was proved, by the evidence of the senses, that local irritation did exist there, and, from being abated by the leeches, all the symptoms vanished.

Another circumstance worthy of attention is the violent screams, or crying, of the child, when in the act of straining at stool, Dr. C. sometimes attributes the accession of the fits to straining. I do not know that any other convulsive paroxysm is produced from such a cause. An obvious question now arises as to the cause of this crying when in the act of straining ? Is not pain the natural answer ? Then the next question is, where was this pain situated ? Most probably in the spine.—Since it has already been proved to exist there, from mechanical pressure externally, why might not a similar pain be excited by a deep inspiration elevating the ribs, and consequently giving motion to them at their articulation with the spine ? All this, however, is hypothesis. The best practical hint elicited

from this case, is, under the like circumstances, always to have an eye to the spine.

CASE XXXI.

RACHEL KAY, æt. 23, an unmarried woman, of a scrofulous habit, was admitted at the Dispensary, in the beginning of September 1814, and gave the following history of her case. Three years previously to this period, she had the misfortune to have an illegitimate child; and, in the second or third month of her pregnancy, accidentally, as she was cleaning a window, fell against the rail of a banister on her belly, as she supposed; whence, to the above date, she had experienced a great deal of pain about the eleventh or twelfth dorsal vertebra, so as to incapacitate her from lifting any considerable weight,—such as a pail of milk or water. Soon after this accident she also perceived a very distressing pain in the right side, about the cartilaginous junction of the false ribs. These pains, especially the latter, were the worst in the evening, and during the night, particularly if she slept on her back or left side; which, however, she was mostly prevented from doing. She was daily afflicted with a severe pain in the head, more especially in the afternoon, which put on the form of hemicrania; but had little of it in the night. Six months before

her admission, she was attacked with hæmatemesis, and vomited, as she imagined, half a pint of blood. This was at the menstrual period, and the same occurrence happened at the next return of this discharge, together with an epileptic fit at its commencement. From this time the fits had almost come on daily, and often five or six times a-day, as well as very frequently in the night. The hæmatemesis, also, returned often, but not always at the menstrual period.

I had frequent opportunities of seeing her in these fits. Her hands were sometimes clenched,—her eyes distorted, with the eye-lids partly closed ;—and frothing at the mouth, together with globus hystericus. There was also some degree of opisthotonos ; and the muscles of the throat and neck were thrown into violent action. These fits seldom continued less than three, or more than eight, minutes ; and, when severe, she was insensible in them.

On admission, her pulse was small and frequent, and, at mid-day, 110 ; her appetite was impaired, though irregular ; and she had considerable thirst, with a furred and yellowish tongue. Her bowels were greatly constipated ; and her urine was variable in quantity, but mostly high-coloured, and sometimes let fall a settlement. Her chilliness in the day was excessive, and succeeded by heat in the evening, and occasional night-sweats.

The pain, which still occupied a great part of the right side of the head, particularly a little above the

right eye, passing towards the left frontal sinus, was yet distressing, though not uniformly so. This, when most severe, often produced a very copious hæmorrhage from the nose; previously to which, the head was hot, from some increased action in the carotid arteries, and their ramifications. The pain, also, in the side, still continued unaltered, though various means had been employed for removing it; and she complained of frequent faintness, alternating with an unpleasant gnawing sensation at the stomach.

For the first ten weeks after her admission, she experienced little pain in the back; and, as she had not yet mentioned the circumstance of her fall, all her complaints had been resolved into worms. Sixty of the teres kind, in this interval, had been voided by the use of the following medicines:—

R. Hydrargyri submuriatis, gr. vj. nocte horâ decubitûs
sumend.

R. Jalapæ rec. pulveris, gr. xxvj.
Potassæ nitratis pulveris, gr. x. Misce, mane seq. su-
mend.

R. Spigeliæ radicis cont. ℥j.
Aquæ fontanæ, ℥xx. decoque ad ℥xij. colato adde
Liquoris ammoniæ acetatis, ℥iij.
Syrupi, ℥ij. Misce, sumat cochl. iij. vel iv. larg. ter
quaterve in die.

R. Stanni pulveris, ℥iss. semel in die ex quovis idoneo ve-
hiculo sumend.

℞. Sennæ confectionis, ʒij.

Jalapæ rec. pulveris, ʒiſs.

Potassæ nitr. pulv. gr. x.

Syrupi Rhamni, q. s. ut fiat electuarius ejus sumat-cochl. j. vel ij. min. horâ somni alvo astricto.

Notwithstanding the efficacy of these medicines in expelling worms, there was little alteration in the state of either her fits or her pains; although other means had been conjoined, such as an emetic, and the abstraction of twelve or fourteen ounces of blood, twice from the arm, as well as liberally from the head, either by leeches or cupping, for many weeks successively. A seton was inserted in the side, and blisters to relieve the head were often had recourse to. These means, however, had prevented the return of epistaxis and hæmatemesis; but the menorrhagia was little abated. It was from this last circumstance, and the specific character of the cephalalgia, together with pains and weakness in the lower extremities on loco-motive exercise, that grounds were afforded for suspecting some spinal disease; and which gave rise to such questions as drew from her a more minute history of her case, such as is given above—for hitherto she had not mentioned the accident of falling.

On pressing on the eleventh or twelfth dorsal vertebra, considerable pain was excited, but in no other part of the spine. This was the part, as

already stated, in which she had occasionally complained of pain since her fall.

Caustics were now applied, and the citrate of potass was substituted for the vermifuge mixture, but the electuary was continued. Henceforth, in two months, she had improved in health, both generally, and as to the menorrhagia; but as to her fits and distressing pains, less amendment was perceptible. From this time, however, she gradually recovered, in all respects, and was dismissed at the end of seven months from her admission, as her fits had not appeared for nearly five weeks; and, in other respects, was in good health, save the pain in her side and head, which had not quite left her.

REMARKS.

On a review of this intricate and complex case, it must appear that two exciting and co-existent causes are capable of producing an anomaly, or a mixed character of morbid phenomena: for, on the one hand, we have most of the prominent symptoms that usually attend spinal disease; and, on the other, those that cannot be ascribed to this cause may principally be attributed to the worms—particularly the fits; though it must be confessed that one or two of these are observed, sometimes, at the commencement of distortion; but which, however, had not taken place here. How far the circumstance of worms acted as an exciting cause in pro-

ducing the hæmorrhagic discharges, it is difficult to say ; but that they had considerable influence will not be doubted,—although the disposition to hæmorrhage in spinal affections is considerable, as already noticed. The fits continuing after the expulsion of the worms, seems to prove that the former were not occasioned by the latter ; but we know, from a law in the animal frame, that the power of habit is such as sometimes to act secondarily, after the original cause is removed,—especially when in conjunction with other auxiliary means.

CASE XXXII.

ELIZABETH HAWTHORN, æt. 28, a married woman, apparently of a scrofulous habit, and without children, was eighteen months ago first affected with indisposition, by a pain in her left side extending towards the spine ; for which she had found no relief from the different means which had been resorted to, save that of applying pressure to the part. This pain was at the anterior termination of the bony part of the lowest false rib. Coeval with this, a most distressing pain seized her in the right side of the head ; but which was the worst over the right eye, passing along the lower part of the forehead towards the left eye, and seldom with any intermission, save when asleep.

On her admission at the Dispensary in August 1814, her pulse, at mid-day, was soft, rather small, and at 96,—tongue somewhat furred and yellowish, but had little thirst;—urine high-coloured, with sometimes a settlement; at other times pale, and without any :—was habitually chilly in the day-time, succeeded by some heat in the evening and fore-part of the night.—Her bowels were constipated, and she complained of great languor, and some pain occasionally in the right thigh and leg on walking or long standing. She was the easiest in bed, and could lie on either side.

Before the accession of these complaints she had been regular; but, since, the menstrual periods had been less frequent, and the discharge scanty.

She had been under the care of several medical men, all of whom had employed leeches, blisters, &c. both to the side and head, which afforded her no relief.

On examining the left side, the end of the rib, being the point at which she complained of pain, seemed to start posteriorly, as if it would protrude through the external covering. Pressure on this part afforded her no increase of pain; but, on the contrary, always relieved it; however, on applying moderate pressure to the articulation of this bone with the spine, she felt a good deal of pain, which was not the case in any other part of the vertebral column.

Emetics, the citrate of potass, and the laxative

mixture were now prescribed, together with a seton near the spine, and abstracting blood from the head, by cupping and leeches, as well as frequent blisters between the shoulders and behind the ears : all of which were of little advantage in relieving the head, for the first two or three months ; at the expiration of this period, however, she seemed to experience some relief from the following pills :—

Rx. Extr. Hyoscyami,
Ipecacuanlæ Pulveris,
Zinci Sulphatis, ā gr. xx.
Syrupi, q. s. fiat massa, in pilulas viginti dividenda.

One or two of these pills were ordered three times a-day, and to be increased gradually so as to excite some degree of nausea. As the seton now discharged little, a caustic-issue was substituted, although she had for some time ceased to complain of pain in the side.

At the expiration of four months from her admission, she was in the following condition ; viz., appetite somewhat improved,—pulse, though not slower, was more full, and her tongue was nearly clean.—Urine paler, and few rigors, with very little heat, and moderate night-sweats ; but the pain in the head, though frequently remitting, still never left her when awake. On the whole, however, it was less severe. Soon after this she was discharged at her own request.

Though this case possesses little practical interest, yet it shews, as well as the two last, and

Haigh's case, the obstinacy of this species of cephalalgia, and the necessity of inspecting the seat of chronic pains in different parts of the trunk ; for, had an examination here been resorted to sooner, the result, in all probability, would have been of incalculable advantage to the patient. Here we have also disease in the left side of the spine, producing pain in the right side of the head, and right thigh ;—but similar pains in the head, from the same cause, are far from being uncommon, though I have thought that, when either distortion or disease affects one side of the spine, the lower extremity on the same side sympathizes more than the other.

CASE XXXIII.

BENJAMIN STEPHENSON, æt. 30, was admitted at the Dispensary in the summer of 1815, for a chronic pain in the back, attended with other symptoms of indisposition. Five years prior to this time, on being a militia-man, and exposed to hard duty, he was first seized with this pain, which, on taking cold, or from a hard day's work, had been troublesome ever since, especially in the spring and autumn.

During the greatest part of this period, and down to the above date, he was unnaturally susceptible of cold,—had a defective appetite, and

complained of great weakness in the lower extremities on moderate walking-exercise, or on long standing, with pain in the forehead in the day-time ; and was costive.

On his admission, his pulse was soft, rather weak, and at 86,—tongue rather furred, and inclining to an orange hue, with some little thirst, and a further loss of appetite. Though the weather was hot, his chilliness was undiminished during the day, and followed by some heat in the night, but seldom succeeded by perspiration.—Urine high in the morning, with some deposit, but differed less from the healthy state in the day-time, —and his bowels were more costive. He appeared languid and out of spirits ;—was grown thinner, and his countenance was somewhat sallow, having lost the bloom of health. For the last four months, the pain in the upper part of the forehead had increased, and was the most severe on stooping down, or raising himself up. The left side of the uppermost lumbar, or lowest dorsal, vertebra, was, moreover, the seat of the pain of which he had so long complained, and which was aggravated from causes already detailed ; as well as by lifting weights, or the like. Lying in bed, on his back, he found the easiest position ; but on turning himself suddenly on to his back, he felt this pain sometimes acutely.

On pressing on this part, which was about an inch from the spinous process, he complained of

considerable pain; but in no other part of the spine. At this point a large caustic was immediately applied, which produced a deep eschar, that was five weeks in digesting off. From the time the caustic was applied, the pain from disease left him, and the discharge from under the eschar soon became considerable; and from which, together with an emetic, the citrate of potass, and the cathartic mixture, he made rapid progress towards amendment; and was discharged in nine weeks, freed from all his complaints, with a strong recommendation to keep his issues open for several months longer.

CASE XXXIV.

ELEANOR SHAW, æt. 41, after having born seven living children, miscarried, twenty months before I saw her, in the fourteenth week of her pregnancy, and ever since, she had been afflicted with pain in the back, and weakness in the lower extremities, together with menorrhagia.

In the summer of 1815, she was admitted at the Dispensary, and, though the season was excessively hot, she felt uncommonly chilly during the day; and had some heat in the night, followed by occasional perspirations in the morning. Anorexia, and uneasiness, or a sense of tightness, at the præcordia, were prevalent; and from this part a pain

was sometimes felt, as if it communicated with that in the dorsal column, both of which were aggravated in the day-time, more especially in the evening, or after bodily exercise ; for, notwithstanding the degree of weakness this poor creature was reduced to, she was obliged to spin the jenny daily, and fare barely,—circumstances to which she in a great measure attributed her complaints.

Her pulse was soft, and somewhat contracted, and, at mid-day, 84 ;—her tongue was furred, and of the orange hue, but she seldom had any thirst ; and was habitually costive.—Urine somewhat high, particularly in the morning, and often let fall a mucous deposit, such as generally happens in these cases. She suffered almost daily from a pain along the course of the coronal suture, which mostly came on soon after dinner, and continued without intermission till she retired to rest. Her legs, during the day, were generally weak, and torpid ; and she was dizzy, as if intoxicated ; insomuch as not to be able, in walking, to keep the causeway. She could lie in any position in bed, and turn herself, with seldom any pain.

The spine, on examination, appeared natural to the eye ; but, on pressing on each side of the lowest dorsal vertebra, she complained of much pain ; and at this part there was also a slight fulness of the integuments.

Caustic-issues, the citrate of potass, and the cathartic mixture, were prescribed with the best

effects ; for before the sloughs were cast off, which was in five weeks, the discharge was copious, her appetite improved, and her look materially altered for the better ;—her tongue was cleaner, and her bowels less costive ; in short, she was discharged in nine weeks from her admission, in good health, after enjoining the necessity of keeping open her issues for several months longer.

This poor woman had been under the care of several practitioners, the last of whom was a physician, who had prescribed tonics, for some time, which afforded her no relief ; but, on the contrary, she fancied they did her harm.

CASE XXXV.

MARTHA GOODHALL, æt. 52, and of a scrofulous habit, twelve years before I saw her, had had the misfortune, while carrying a pail of water, to fall down and bruise her back against the side of the vessel. From that time she had occasionally complained of pain in the part, which, for the last eight months, had been more severe, attended with fever, and some pain in the stomach, and right iliac region.

Her pulse, on admission at the Dispensary, was soft, and at 110,—tongue furred, and of a deep yellow cast,—was constantly chilly in the day, with some heat in the night, succeeded frequently by

perspirations. The pain in her loins was always increased by much walking, or long standing, on stooping down or rising up:—appetite bad,—thirst inconsiderable,—urine sometimes high, small in quantity, and deposited a mucous settlement; at other times paler, and more copious. She was much harassed, throughout the day, with pain in the head; especially on waking in the morning, which passed along the superciliary ridge, but was worst a little above the outer angle of the right eye. Another pain, but somewhat less troublesome, she often perceived on the right side of the occiput. She was obstinately costive, her extremities cold, and appeared emaciated.

On uniformly pressing on every part of the spine, no pain was produced, excepting on the middle lumbar vertebra, which was very considerable. This, as well as the two adjoining vertebræ, was pushed somewhat forwards. The sacro-lumbalis muscle on each side appeared more elevated, and formed a deep groove; but I could not discover any want of bony substance, nor any stridor abdominalis.

A couple of caustics were applied to the loins, and an emetic, along with the citrate of potass,—and the cathartic mixture was prescribed.

From this time her recovery commenced: as her pulse descended, her pains vanished, and her tongue grew cleaner daily, with a corresponding increase of appetite; insomuch that, in ten weeks,

she was discharged in good health, with the usual recommendation to keep her issues open for a considerable time ; but in two months afterwards, I saw her, and, though remaining well, she had imprudently dried them up.

This woman, like the last, had, occasionally during her indisposition, been under medical treatment, without deriving the least benefit ; especially for some months previous to her admission, when tonics were administered, which she was certain did her harm.

CASE XXXVI.

MR. R. B., æt. 39, a pretty stout and well-formed man, at the age of 19, whilst carrying a very heavy weight on his shoulders up a flight of steps, had the misfortune to slip with his foot, and to sprain his back violently ; the consequence was, not only pain in the injured part, but paralysis of the lower extremities for a few days. These effects, however, soon after ceased, but for twenty years afterwards, he was, on catching cold, or carrying weights, troubled with pain in the loins ; though, in other respects, he enjoyed a good state of health ; but, after this interval, was seized with symptoms of fever ; viz., rigors, heats, and excessive night-sweats,—some thirst,—tongue furred,

and of a dingy aspect,—pulse strong, at 84,—appetite bad,—urine high, and sometimes rather turbid, and his bowels costive,—pain in the loins considerable, and assuming the character of lumbago. Some of the large joints of both upper and lower extremities were painful, and somewhat swollen; and he complained of great torpor in the left hand, which also appeared paralytic; but this defect I could not ascribe to any irritation in the wrist, which was trifling. The following was prescribed:

Rx. Mist. Guaiac. ℥vj.

Tinct. Sennæ, 3vj.

Tinct. Guaiac. 3℥s. Misce, sumat cochl. iij. larg. ter in die.

This medicine procured three or four copious motions daily, and afforded him considerable relief; for, after taking it a fortnight, the inflammatory symptoms had nearly subsided, and his hand obtained some little additional strength,—but no relief for the pain in the loins, which appeared worse.—Pulse at 72. In ten days further, there was little alteration, save that his pulse was down at 54, strong, and full. The posterior half of the tongue was furred, and changed to a yellow hue, though there was but little thirst;—appetite rather improved, but the urine little altered.

From this state of his pulse and tongue, as well as the affection of his hands and loins, I was induced to suspect some spinal disease, independent of lumbago; and, on inquiry, he gave me the

above short history. On examining the spine, three of the middlemost lumbar vertebræ were found pushed a little forwards, so as, anteriorly, to form an increased curve. On pressure, however, he complained of little or no pain; and from this circumstance, and the idea still prevalent, that this complaint in the loins was solely rheumatic, superinduced to an old sprain, the application of caustics was deferred, whilst his medicine was ordered to be continued, with the addition of thirty drops of the *Ol. Terebinth. rect.* in a liquid vehicle, every night at bed-time.

In a few days his pulse began to rise in number, his tongue to grow cleaner, and urine paler,—his appetite to improve, and his hand daily to acquire more strength. In short, in less than seven weeks from the time I first saw him, his health appeared quite re-established, as his appetite was natural, he was free from pain, and the use of his hand was completely restored;—but his pulse was again up at 84 for a short time.

REMARKS.

Although no useful or practical inference can be drawn from this case, yet one question naturally presents itself,—namely, what relation or connection had the affection of the hand with the pain in the loins? I have never seen any such complaint as the former in the upper extremity accompany disease in the lumbar region. Here there was no

apparent affection of the head, neither do the swelling and irritation of the wrist, which were trifling, satisfactorily account for the paralysis; although we sometimes find the latter accompanying, or rather the consequence of, chronic rheumatism.

Does not the circumstance of the pain in the loins being rather increased, as it diminished in the extremities, seem to prove a metastasis, that might tend to produce congestion, or inflammation, extending to the theca vertebralis?—a supposition somewhat countenanced, from the state of the pulse and tongue.

CASE XXXVII.

SARAH MELLOR, æt. 35, a married woman of a fair and ruddy complexion, was admitted at the Dispensary in the month of August 1815, after having had six children. Thirteen years before, she had had the misfortune to sprain her loins, by slipping down a step or two with a heavy load on her shoulders; since which accident, on lifting weights, or making a false step in walking, she had felt a pain in the part. When pregnant of her last child but one, she daily span on a large jenny, which caused a considerable increase of this pain; the consequence of which was a premature delivery, and a dead child.

During her last pregnancy, she suffered an aggravation of this pain, which, till her admission, had continued with few intervals of abatement, accompanied with frequent catchings of the lower extremities, both day and night ; but which last had troubled her but little since. In her last confinement, twenty weeks before her admission, she had a very troublesome eruption on the pudendum, which removed the pain in the loins ; but, on its retrocession, the latter returned.

When admitted, her pulse, at mid-day, was soft, and at 96,—tongue furred, and yellowish, with some little thirst, appetite indifferent,—was chilly in the day-time,—hot in the evening,—and had frequent night-sweats. Her bowels were costive, stools scybalous, and urine sometimes high-coloured, and differing little from that state heretofore so often observed in similar cases. She had pain in the right side of the head, which was worst over the right eye, and passed transversely toward the left, as in Hawthorn's case, but with less severity. She also complained of occasional sickness or faintness, together with flatulence at the stomach ; and often felt, especially on rising from bed in the morning, a peculiar numbness in all the parts from the navel downwards ; but more particularly in the right leg, which was often painful.

The pain in the loins was often aggravated in bed, which induced her to consider it rheumatic ;

and was much felt on stooping down, or rising up ; but more particularly if raising, at the same time, some considerable weight. She complained, also, of weakness in the lower extremities, on long standing, or loco-motive exercise ; and, when in bed, she was the easiest when laid on her right side, with her legs extended, and her heels retracted.

On examining the loins, and pressing about an inch distant from, and on the left side of, the spinous process of the middle lumbar vertebra, she felt great pain, that was confined to a space somewhat larger than a crown-piece. Several of the middle dorsal vertebræ took a slight bend towards the left scapula, under which she often perceived a shooting pain ; and the whole of the right scapula projected more than the left, and its distance from the spine was greater.

A large caustic was applied to the seat of the pain in the loins ; and long before the eschar had digested off, which was slowly effected, a copious discharge was obtained ; but the pain in the part ceased on its application. She continued gradually to recover, and was, at the end of fourteen weeks, discharged in good health : during all this time, she had nursed her child. The rest of the treatment was the same as in the last case. I saw this woman twelve months afterwards, in good health ; and who informed me that she dried up her issue soon after she was discharged.

REMARKS.

We have here another proof of disease in the left side of the spine, producing pain in the right side of the head, and corresponding leg ; but whether similar disease in the right side of the spine will cause the same effects on the left, I cannot fully determine ; it is, however, certain that disease in this situation does not always produce exactly these symptoms ; for in Stephenson's case, the pain was confined to the whole of the forehead. This case also further illustrates the chronic nature of spinal disease, when supervening to sprains, or external injury ; but the characters of which will always depend more on constitutional, than exciting, causes.

CASE XXXVIII.

MRS. HINCHLIFFE, æt. 47, a married woman, of a sanguine complexion, and scrofulous habit, and who had born two children, the younger of whom being eight years of age, applied to me on the 6th of May 1815, and who appeared to be labouring under considerable fever, her pulse being somewhat hard, and at 112,—thirst great, urine high-coloured, changeable, and often rather turbid.—Her tongue was much coated, and of an orange hue,—rigors frequent, but less constant than for-

merly,—had great heat in the fore-part of the night, succeeded by profuse perspirations,—appetite bad,—bowels obstinately constipated, and her menses deficient,—and at the extended periods of five weeks. She complained of severe pains in the posterior muscles of the neck, which ascended better than half way up the occiput, as well as descended towards the scapulæ. There was also a pain which shot through from the middle dorsal vertebra towards the lower part of the sternum ; and a third in the lumbar region ; which, as well as the others, was increased in the evening, but most severe in bed.

Between three and four years before I saw her, on descending a flight of stone steps, she unfortunately fell, and hurt her loins severely ; but, by the aid of a plaster, she soon fancied herself well ; subsequently, however, she occasionally felt pain in the injured part, especially on long standing, or lifting great weights ; but on the evening of a washing-day, she suffered most from it.

Her lower extremities were weak and torpid, attended with pain in her knees and ancles, and with great coldness in the right leg, in which she occasionally experienced a sensation in bed, and, in a few instances, in the evening, similar to a slight electric shock.

In August 1814, she repaired to the sea-coast, for the benefit of the sea-air ; and drank the water for some weeks, but with no apparent effect ; and

in the Christmas following, was seized with a smart rigor, which ushered in the febrile symptoms that had continued increasing up to the first mentioned date.

On examining the spine, some of the lumbar vertebræ were found jetting forwards ; especially the second and third, the spinous process of the latter being, as I thought, lessened, and on pressing on which, she complained of considerable pain. The sulcus, formed by the two sacro-lumbales muscles, was deep ; and the whole dorsal column exhibited a greater segment of a circle than natural ; the cervical vertebræ making rather a counterbend, with the head thrown some little backwards. From the arched form of the dorsal column, its distance from the sternum became greater, thereby causing a stretching of the mediastinum, sufficient to account for the pain shooting in this direction.

On falling down the steps, she inflicted a wound a little above the left eye, which bled most profusely ; and, ever since, the vision of this eye had been imperfect : now, indeed, there was little mobility in the iris of either eye, when exposed to the light.

Caustics, an emetic, the citrate of potass, and the cathartic mixture, with strong purgative clysters, as her bowels were obstinately costive, were prescribed ; but so far were these means from relieving, that I thought the discharge from the

issues weakened her ; for she gradually grew worse, and sunk under the disease, in six weeks from the commencement of this treatment.

REMARKS.

There can be little doubt that, in this woman's case, all her sufferings centred in the loins ; for, as the disease advanced in this part, the vertebræ were pushed somewhat forwards, and an alteration in the form of the spine was the consequence, as this change of structure was necessary for preserving the centre of gravity ; for the spine, now assuming the double sigmoid shape, would necessarily produce some derangement in the contiguous parts, which, together with the power of sympathy, seems to account for all the distressing pains in the upper part of the spine ; and which had baffled all attempts, both internally and topically, to relieve them ; as leeching and blistering, with the use of various internal remedies, had been had recourse to for some time, under an idea that the case was rheumatic, without any attention being paid to the loins ;—a mistake of incalculable importance to the patient.

This case further illustrates the theory of stridor abdominalis being confined to a certain period of life ; for here, as well as in the two preceding cases, there was nothing of this affection where the disease in the loins was in the same situation with

many of those cases of stridor abdominalis already given.

The circumstance of spasmodic catchings in the lower extremities, in this and some of the preceding cases, is also deserving of attention ; for, when this is present, in conjunction with weakness and torpor, or pains in the lower extremities, spinal disease may be suspected.

CASE XXXIX.

HANNAH MILLS, aged 38 years, and having had eight children, applied March 23rd, 1813, and gave the following history of her case ;—Twelve years ago she was seized with pyrosis, or a vomiting of a thin watery fluid, preceded generally by gastrodynia. These attacks continued from one to three days, and returned mostly every ten days, or a fortnight ; when, however, she happened to vomit bile, these intervals were lengthened. Notwithstanding these frequent visitations, she in other respects remained in good health, till two years and a half before the date above specified, when she was attacked with menorrhagia, which continued for six months, weakening her exceedingly, and was always in proportion to her appetite.

Soon after this she became pregnant, and went to her full time, bare a living child, and suckled it

for seventeen months, after which, being about a month before I saw her, she weaned it. During this period of lactation her health had declined much ; and she had suffered from pain in the loins, attended with great weakness, insomuch as to have been unable to stoop down to raise the least weight ; and, latterly, she had experienced great weakness and torpor in the left thigh. For eighteen months previous to my seeing her, she had not been able to turn herself in bed ; her husband having been frequently under the necessity of changing her position in the course of the night, by turning her upon the left side.

Her appetite was very defective ; and she had occasional vomiting, which she attributed to oppression, and stricture across the præcordia. Her pulse, also, at mid-day, was at 112,—tongue rather furred, and of a slight yellow cast, with little thirst. Urine sometimes high,—at other times pale, and her bowels greatly constipated ; insomuch as to be frequently without stools for a week. She was chilly throughout the day,—had some increased heat on the upper part of the body in the beginning of the night, along with cold feet and legs, but seldom night-sweats. In proportion to the increase of these symptoms, she had continued to lose flesh, notwithstanding she had been under the care of several medical men ; all of whom had recourse to tonics, which afforded her no relief.

On examining the spine, the declination of one

part of it was apparent, with a lateral flexure at one point of it only; viz., the spine, reckoning from the sacrum, exclusively, to the fifth or sixth dorsal vertebra, preserved its rectilinear figure, though inclining to the right side; at this point it then gave way by bending more to the right, and thereby elevating the scapula; and the shoulder of the same side was lower, by half an inch, than the other. The right hip was considerably enlarged, and higher, by nearly an inch and a half, than the other,—consequently the limb appeared shorter.

On pressing on the spine, she complained of a sub-acute or obtuse pain in the lowermost lumbar vertebra; and, on questioning her, she acknowledged having been privy to her distortion, during a great part of her indisposition, and which she attributed in part to her long-continued uterine discharge, and partly to the occupation she followed, which obliged her to lean on one side.

A gentle emetic, the citrate of potass, and the cathartic mixture, were prescribed; and a couple of caustics were also applied contiguous to the lowermost lumbar vertebra; which were removed after having been on two hours, in consequence of the pain being so violent as to produce hysteric fits. The effect produced on the skin by these, was little more than exciting inflammation, and destroying the cuticle; but the influence on the system was somewhat surprising; for, in five days subsequently to the application of the caustics, she

walked to the house of the writer, being the distance of a mile and a half, and informed him, that in two days after their operation, she could turn herself in bed, and in the two last nights could lie comfortably in any posture, but had confined herself principally to the right side ; and, besides, she could now take the child out of the cradle without experiencing pain, or much weakness, and could press as much in walking on one leg as the other ; whereas, for some time previously, she had rested the greatest part of her body on the right leg.

On a second examination, the lower portion of the spine was found to have resumed its natural direction ; and no dissimilarity was observed in the size, situation, or shape, of the hips ; but less alteration was apparent in the upper part of the spine and scapula. The caustic-issues were healed, and on pressing on the parts, she felt very little pain ; her pulse, also, was reduced to 104, and the other febrile symptoms proportionally diminished.

Notwithstanding this favourable change, she continued for three weeks longer, without much alteration ; but, by the application of a small blister to the loins, and continuing her medicines, she got well in about two months ; but the flexure of the spine, and protrusion of the scapula, still remained in a partial degree.

CASE XL.

Miss S., æt. 18, informed me, that, when twelve years old, and at boarding-school, in consequence of being very tall and slender, and stooping forwards, she was put into braces, in order to keep her head and shoulders erect. This discipline punished here severely by exciting pain in the loins, and in different parts of the trunk, insomuch as sometimes to cause sickness and vomiting; and these symptoms, she supposed, were aggravated by sitting much in one posture.

After stopping some time at school, she returned to her friends, and continued in tolerable health, having, however, pain in the loins occasionally, till the spring of 1813; though, for the two preceding years, she had observed her left hip larger, and the ribs and scapula of the right side to protuberate; when she was seized with symptoms of active fever, accompanied with some soreness and pain in the left side of the hypogastrium, nigh to the anterior spinous process of the ilium, together with weakness, pain, and torpor, in the lower extremities, insomuch as to render walking somewhat difficult; but the pain in the loins was not increased.

At this time her pulse was at 96, and inclining to fulness,—tongue rather furred, and white,—but

she had little thirst ;—appetite bad,—cheeks flushed,—and had frequent rigors alternating with heats and perspirations.—Urine rather high, with little sediment, and was costive ;—the pain in the hypogastrium being always aggravated before having a stool, and which the latter as often relieved. This pain incapacitated her from lying on the left side ; but, previously to the access of which, she could only sleep on it.—Had every morning, during breakfast, an attack of stridor abdominalis for about eight or ten seconds, which returned in a similar manner and degree at eleven o'clock in the forenoon ; but this was not the case when in bed.

Rest, febrifuge and cooling aperient medicines, with the repeated application of leeches and blisters to the hypogastrium, reduced all these inflammatory symptoms in a fortnight, leaving, however, an increased debility, both generally and in the lower extremities.

In six or seven weeks afterwards, she experienced a second attack of fever, and a return of pain and soreness in the same part, with only a slight discoloration ; but the soreness was such that she could scarcely bear it touching, though there was little of either tension or tumefaction. The same means of cure were again had recourse to, with the addition of bleeding once in the arm, to the extent of eleven ounces ; and in five or six weeks she recovered, if we except some remaining fever, attended with increased debility ; so that she was

unable to stand or walk without the assistance of two persons.

She was in this situation when the spine was examined, and which was found to take a sweeping bend to the right side, beginning at, or about, the sacrum; and, by pressing against the ribs, protruded them posteriorly; so as to elevate the scapula which was thrown from the spine to a distance double that of the other. The left mamma was enlarged, and the ribs protuberated anteriorly on the left side of the sternum, rendering the part extremely susceptible of the cold. She complained, also, of some pain about the middle dorsal vertebra, but, on pressure, perceived little either here, or in any other part, except at the lowest lumbar vertebra, which was very considerable.

Caustics were now applied to the loins, and the recumbent posture enjoined; and the citrate of potass, with the cathartic mixture, and occasional emetics, were prescribed. These means soon relieved the pain in the loins; but the fever and weakness continued a long time without much alteration; her pulse ranging from 80 to 100,—tongue rather furred, and whitish, with little thirst; and her urine mostly pale, seldom higher than natural, and without deposit;—had, also, occasionally, a troublesome catarrhal cough, with hoarseness; and now and then a gentle diarrhœa.

Notwithstanding, for the first ten months, she obtained little ground, yet, afterwards, signs of

amendment were more apparent, as her appetite increased, and she began to acquire more substance and strength;—an acquisition that continued, though slow and progressive, till the expiration of eighteen months from the application of the caustics, when she was able to walk short distances without much inconvenience; and likewise began to exhibit marks of recruited health. She, however, in a few weeks, had a partial relapse; her appetite again failed her, she was less able to walk, and her pains returned, especially in the loins. This slight relapse I attributed to some inattention to the recumbent posture.

She was now prevailed upon to wear Eagland's stays, which soon were the means of regaining for her the ground she had lost, and of perfecting, with the aid of sea-bathing, (from which she found great relief,) a complete recovery, as far as regarded her general health; but the distortion still remained in a partial degree, in the spring of 1817; at which time, also, she continued one of the issues open.

In the autumn of the same year I found this young lady in excellent health, with a further amendment of her distortion.

REMARKS.

This case, without affording any prominent traits of character, shews, with others that might

be adduced, that when the cause of irritation in the spine is dependent on mechanical agency, caustics produce no speedy effects, in general; for here the morbid action in the loins seems to have been excited principally by the superincumbent weight, occasioning the declination and incurvation of the spine; though it must, however, be admitted, that when the caustic-issues discharged less, she found herself more unwell; but whether this circumstance was a cause, or an effect, I am incompetent to say. It is mostly in those cases of spinal disease where the tongue is furred, and of a yellowish tinge, and where the urine is somewhat high-coloured, with some deposit, that caustics display their best effects.

The circumstance of irritation in the abdominal covering, claims attention, on account of its specific character, being indicative of disease in the neighbouring part of the spine; and, in general, when the latter is present in the lower lumbar vertebræ, the sympathetic inflammation is to be found high unto the anterior spinous process of the ilium.

Although stridor abdominalis was here present, in a slight degree, yet I consider it far from being a well-marked case of this disease: to constitute which, the seat of the affection was too low in the spine,—it requiring to be situated between the second and third, or rather third and fourth, lumbar vertebræ inclusive.

CASE XLI.

MR. J. T., æt. 28, a married man, of a sanguine complexion, and scrofulous habit, and whose occupation was that of a cloth-merchant, applied in the spring of 1817 for, what was supposed, an incipient phthisis pulmonalis ; which had been gradually coming on for several preceding months, and attributed to sleeping in a damp bed. During this indisposition, he had been under the care of two respectable practitioners.

I found him considerably reduced in substance and strength. His complexion was sallow ;—appetite bad ;—pulse ranging from 104 to 112, contracted, and, generally, at its maximum in the morning. The posterior part of the tongue was furred, and of an orange hue ; and there was also some thirst.—Slight shivering, or habitual chilliness, had long been present in the day, and, latterly, succeeded by more heat, and partial night-sweats. About this time he was also attacked with a smart rigor every morning at two o'clock, that continued for an hour, and was succeeded by an increase of perspiration. Urine high-coloured, now and then, somewhat turbid, and voided with some heat and pain. He complained of soreness in the lower part of the hypogastrium ; as well as of pain in the loins, which was aggravated towards

evening, on lifting weights, &c. In addition to these symptoms, he frequently perceived a pain on the right side of the occiput, as well as in different parts of the chest; for which, blisters had been applied with little advantage.—Had a troublesome cough, which appeared sympathetic, attended with a slight frothy, or thin colourless, expectoration.—He complained, also, of languor and excessive weakness, particularly in his lower extremities; and was confident that his whole vital powers were nearly exhausted.

On examining the trunk, the left side was found to protuberate some little, particularly at the cartilaginous union of the false ribs; where there was a distinct elevation, which had afforded more pain than any other part of the thorax. It will be almost unnecessary to say that this derangement was occasioned by a lateral incurvation of the dorsal column to the left, which depressed the right shoulder some little. On pressing on each side of the spine, below the last lumbar vertebra, considerable pain was excited. From this part four or five ounces of blood were abstracted by cupping, which relieved the pain. Two days afterwards, caustics were applied; and an emetic, the citrate of potass, along with small doses of the powdered digitalis, and the cathartic mixture, were prescribed; and the recumbent posture enjoined.

From this time, he began to recover, as all his pains soon left him, and, in three weeks, his pulse

was down at 88;—tongue much cleaner;—appetite improved; and his bowels less confined.—Urine, though still high, was without heat or pain on micturition, and as to the soreness of the abdomen, it left him a few days after commencing this plan.

After another interval of a month, his pulse was reduced to its natural currency;—tongue nearly clean;—and appetite further improved;—but he complained of some degree of soreness and pain under the sternum, for which a blister was applied. Hitherto his diet had consisted of milk, buttermilk, eggs, and vegetables, with, occasionally, broths; but now a little animal food was allowed, which seemed to agree with him for a few days; after which, however, it was discontinued. The urine, which had become somewhat paler, now emitted, occasionally, a supernatant pellicle on standing.

Notwithstanding he continued progressively to acquire strength and substance, he still complained of pain, or soreness, in, or about, the sternum, which, by resting a little more, soon abated; for, in this respect, he had not been sufficiently attentive.

Henceforth nothing material occurred; and at the expiration of five months, he found his health completely re-established,—having acquired more substance than he possessed at the commencement of his illness. Sea-bathing, however, was recom-

mended; and from the use of which he found himself greatly invigorated. The caustic-issues, which had discharged well, were still ordered to be kept open.

CASE XLII.

Miss T. *æt.* 21, and tall, with a rather long spine, but otherwise well formed, about fourteen months before I visited her, had been attacked with pulmonary inflammation; for which she had been copiously bled, and treated in the usual way. Subsequently, for nine months, she continued in tolerable health, when she again had a return of this disorder, though in a slight degree; for which also she lost some blood.

Since this last attack her appetite had failed, with a consequent loss of strength, substance, and complexion. Had frequent pains in different parts of the thorax, especially in the left side, as well as occasionally in the loins. There were also some trifling cough and dyspnœa on bodily exertion, and pains and a degree of torpor in the lower extremities: the former being confined principally to the knees, especially to the right; and the latter to the posterior muscles of the thighs, and occa-

sionally to the ancles. Periodical head-aches, and vertigo, in the day-time, were often experienced, as well as faintness, and a disposition to syncope. Complained of chills in the day, and heat and occasional perspirations in the night, and of her bowels being constipated.

She had been in this state for four months previously to my seeing her, which was in the summer of 1817.

Her pulse now was at 105, and somewhat contracted ;—tongue white and furred, but not uniformly so ; the least coated parts appearing of a deep red or crimson colour, something like what often precedes aphthæ. Complained also of thirst, and an inclination to vomit. Her weakness, on loco-motive exercise, continued to increase ; as also the pain and uneasiness in her left side, when she lay upon it.

On weighing the circumstances of this case, I had little hesitation in ascribing the symptoms to some spinal derangement ; and, on examination, I found the spine assuming the lateral sigmoid flexion, the inferior angle of which pushed the lower ribs of the left side, so as to cause them to protuberate ; particularly at the place so often described. The posterior part of the middle and inferior ribs of the adverse side protruded backwards, thereby causing an elevation of the superjacent scapula.

The medicines prescribed in the last case were ordered her; enjoining, at the same time, the horizontal posture. From these means, some diminution of her complaints was anticipated; but so far was this from being the case, that, for the two succeeding months, she had several severe exacerbations of fever, for a week or ten days. Her pulse, after averaging 106 in the intervals, rose to 120, or even 130, attended with some degree of hardness. Her heat, preceded by rigors, was excessive, and succeeded by profuse perspirations;—thirst also inordinate;—and her tongue still white, but furred, with a further disposition to aphthæ. The pain in the loins was increased, and extended sympathetically to the uppermost dorsal vertebræ. Under these circumstances, small doses of nitre were added to her medicines; and blood, to the extent of eight ounces, was abstracted from the arm. When this plan of treatment was adopted, Eagland's stays were ordered, as a substitute for lying in bed; but, when provided, the state of the fever, and disposition to syncope, in the erect posture, were such as to render their use improper.

On thus losing ground, I began to suspect that this increase of febrile excitement was connected with, or dependant on, some local irritation undiscovered. I therefore again examined the spine, in the presence of her surgeon, and found

on making severe pressure, on the upper part and towards the right side of the sacrum, that she complained of great pain ; but in no other part of the spine.

Four or five ounces of blood were now abstracted from this part ; and shortly afterwards a blister was applied, and ordered frequently to be renewed ; and in a few days another was laid between her shoulders, by her surgeon. Hence, in a week there were evident signs of amendment, from a diminution of the febrile symptoms.

Notwithstanding this apparent advantage, the fever again returned, with frequent exacerbations, for several days ; and, during the following five or six weeks, though the sympathetic pain in the upper part of the dorsal column was removed by the blister, the effect was only for the purpose of translating it somewhat higher up the spine ; and, as often as this was pursued by blistering, it ascended higher, till it arrived at the upper part of the occiput. About this time, when the occiput was blistered, and leeches resorted to, caustics were applied to the sacrum, as some deep-seated pain was still perceived on pressure, notwithstanding the repeated application of blisters. As soon, however, as a pretty free discharge was obtained from the caustic-issues, she began to experience more decided relief ; as her pains had vanished, her appetite improved, her thirst nearly left her,

and her pulse soft, and at 90. She also rested well in the night; and her bowels were natural; and could sit up two or three hours in the day, and wear her stays.—Thus was she circumstanced when I closed this work. •

This, as well as some of the preceding Cases, which constitute the compound spinal disease, clearly point out the necessity of a careful examination of the spine; and of which, here, I was fully aware, notwithstanding the principal seat of the disease was at first overlooked, in consequence, perhaps, of being situated more towards one side of the sacrum. Whence we may conclude, that, when trifling or sub-acute pains are perceived in the lower part of the vertebral column, attended with others more severe in the upper part of it, either with or without displacement, the whole of the spine ought to be minutely examined.

CASE XLIII.

SARAH SMITH, æt. 52, of a thin and delicate constitution, after the cessation of the catamenia, three years before I was consulted, began, about eighteen months after that time, to be afflicted with pain in the loins, which had continued to in-

crease ever since. Some months after this seizure, she was attacked with menorrhagia, which also had continued till the time when I saw her ; with the exception of some short intervals, occupied with fluor albus.

During all this period, she seemed to have had fever, attended with costiveness, and the gradual accession of debility.

On admission at the Dispensary, her pulse was at 110, small, and rather hard ;—tongue much furred, and yellowish, with little thirst ;—was constantly chilly in the day, and hot in the night, with frequent perspirations. Urine often high, small in quantity, and voided with pain and difficulty ; at other times in greater plenty, and paler ;—appetite bad ;—was always costive ; and complained of weakness and pain in the lower extremities, in walking, or on long standing ; which also, as well as stooping down or rising up, increased the pain in the loins. In walking, she appeared to incline somewhat forwards, and in bed often felt much pain in her back ; but which, during the day, was most afflictive over her eyes, and along the course of the coronal suture.

On pressing on the middle of the sacrum, she complained of great pain for three inches transversely. From this part blood was abstracted by leeches, and two caustics were applied at no great distance from each other ; and the citrate of pot-

ass, and cathartic mixture, along with occasional emetics, were prescribed. For eight or ten weeks she experienced little relief, save as to the pain in her loins: subsequently, however, she began to improve in her general health; and, after remaining four months on the books, was, at her own request, discharged, greatly relieved: as her appetite was moderate;—tongue nearly clean;—pulse down at 92;—and the pain in the loins, and menorrhagic discharge, inconsiderable.

CASE XLIV.

ELIZABETH DAWSON, æt. 35, was, in the summer of 1814, delivered of her seventh child. Her labour was unusually quick, and, when at the point of delivery, very severe; which she ascribed, in a great measure, to the improper conduct of her accoucheur.

Almost immediately after delivery, she complained of considerable pain in the lower part of the sacrum, particularly on the right side; which she considered as different from after-pain. This continued without abatement till the fifth day, when she was seized with a severe rigor and other symptoms of active fever; with, also, an increase

of this pain, for which she was twice bled. From this time she appeared to recover, but, notwithstanding, the pain and fever never quite left her.

Twelve months after parturition she applied to the writer, who found her complaining of an uncommon and distressing heat in the loins, stomach, and right side of the abdomen, with pain in the crown of the head; which often passed down to the left side, and was more felt from eleven in the morning to midnight, particularly at the former hour, at four, and at eleven at night. Her pulse was contracted, but not hard, and ranged from 90 to 100;—thirst considerable;—tongue rather furred, and yellowish;—appetite bad;—bowels costive;—was chilly in the day-time, with an accession of heat in the evening, succeeded by frequent night-sweats. Urine sometimes higher than natural, with a mucous deposit, and voided with some pain and in small quantities, but not unfrequently pale;—moreover, she had been twice attacked with vomiting.

The pain in the loins was not severe, but often felt; and was the worst on long standing, or rising suddenly out of a chair after resting a while, or from much walking, or on stooping down, or rising up. She complained of great weakness in her knees, and of general languor, and had lost much flesh, but was regular.

On pressing on the sacrum, she perceived con-

siderable pain on the right side, near the ischiatic notch. An emetic, the citrate of potass, and the cathartic mixture, were ordered, as well as leeches, and a perpetual blister to the part. These means afforded her effectual relief; for in ten weeks she found her health completely re-established.

CASE XLV.

GEORGE HILL, æt. 27, a delicate man, of a scrofulous habit, was admitted at the Dispensary, in September 1814, for a pain in his loins.

Seven years before, he violently sprained his back, in carrying a large sack of wheat; and ever after this, and before his health became deteriorated, he frequently felt this pain, and more particularly on making a sudden or false step,—such as slipping off the causeway, or the like; and, for the last three or four months, had found himself much indisposed, with more constant pain and some fever.

On admission, his pulse ranged from 100 to 112, and was contracted, but not soft;—tongue furred, and yellowish, with some thirst;—was constantly chilly in the day, with heat and perspirations in the night;—appetite bad;—urine

high in the morning, with a mucous deposit of a lateritious tinge, but pale in the day-time, without settlement, and often voided with some pain and in small quantities. Had also some cough, and complained of pain in the middle of the sacrum, and often in the lower part of each iliac region. These pains were mostly aggravated on loco-motion, bending or straightening the spine, lifting weights, &c. but were generally the easiest in bed.

He complained also of great pain in the middle of the sacrum, on pressure; and to this part a couple of caustics were applied; and occasional emetics, the citrate of potass combined, now and then, with small doses of the digitalis, along with the cathartic mixture, were prescribed.

In the first six weeks some little amendment was discernible, and henceforth he continued slowly to recover; as, in six months from the time of his admission, his pulse was at 84, his tongue less furred, had seldom any pain, and his appetite had increased. He was discharged at this time, with an injunction to keep his issues open for a twelve-month or more, and to continue his milk-diet.

Six months after his discharge he called on the writer, who found he had obtained some further advantage; as his look was improved, and his appetite moderate; but his tongue, towards the root, was still rather furred, and his pulse some little

above the standard of health : he, however, as a weaver, was able to follow his employment. After another interval of six months he again called, and appeared to have completely regained his former health.

FINIS.

ERRATA.

In page 3, line 11, *omit have.*

— 4, — 15, *for is, read are.*

— 22, — 20, *for εγγασίμυθον, read εγγασξιμυθον.*

— 83, — 23, *for is, read are.*

— 206, — 1, *for the, read these.*

